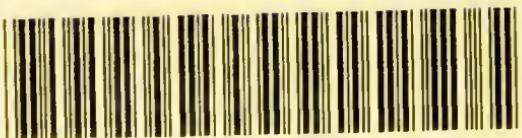


ON MASSAGE

MURRELL

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Henry J. Heilbrunn Esq
With the author's
very kind regards

MASSAGE AS A MODE OF TREATMENT

MASSAGE

AS A

MODE OF TREATMENT

BY

WILLIAM MURRELL, M.D., F.R.C.P.

LECTURER ON PHARMACOLOGY AND THERAPEUTICS AT THE WESTMINSTER HOSPITAL; EXAMINER IN MATERIA MEDICA TO THE ROYAL COLLEGE OF PHYSICIANS OF LONDON; LATE EXAMINER IN MATERIA MEDICA IN THE UNIVERSITY OF EDINBURGH.

THIRD EDITION.

LONDON

H. K. LEWIS, 136 GOWER STREET, W.C.

1887

14980 a 465
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H. K. LEWIS, 136 GOWER STREET,
LONDON, W.C.

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PREFACE TO THE THIRD EDITION.

THE fact of two large editions of this work having been exhausted in about nine months may be regarded as a proof that the subject has attracted some attention.

The difficulty is not that Massage fails to receive due credit, but that it is employed in a number of cases for which it is essentially unsuited. No discrimination is exercised, but its use is advocated for all sorts of chronic ailments. This is a grave mistake and is greatly to be deplored. The work, too, is often carried on by people who know little or nothing about it, and who have not even mastered its most elementary details. They regard it as a special system of treatment, whereas in reality it is only one of a number of therapeutic agents at the disposal of every physician. They practice

without knowledge and often do incalculable harm. It is not pleasant to hear of an aneurysm being ruptured by the efforts of a too zealous *Masseur*, and such mishaps should be avoided.

For this edition the work has been considerably enlarged, and the chapter on "Massage in Poisoning" has been entirely rewritten.

WILLIAM MURRELL.

38 Weymouth Street, Portland Place,
London, W. June, 1887.

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MASSAGE AS A MODE OF TREATMENT.

CHAPTER I.

INTRODUCTION.

SOME two years ago at the Westminster Hospital I delivered a lecture, which was subsequently published in the *Lancet*, on the TREATMENT OF INFANTILE PARALYSIS, in the course of which I referred to the value of Massage as a therapeutic agent. The subject attracted a good deal of attention, and I received a number of letters from medical men in various parts of the country asking for further information, many of my correspondents urging me to publish fuller details of the "New Mode of Treatment." I have much pleasure in acceding to their request, and I do so the more willingly because in Germany and elsewhere I have had the opportunity of witnessing the progress of a number of cases of various diseases treated by this method.

I am afraid that a good deal of misconception exists in this country on the subject of Massage. Many people think that it is only a kind of "rubbing" or "shampooing," whilst others associate it in their minds with the idea of a Turkish bath. Patients often suppose that if they are to undergo a course of treatment they will have to abandon their ordinary occupations, cut themselves adrift from their friends and submit to be isolated or live in seclusion. It is amusing to watch their astonishment when they are undeceived on these points. Another common mistake is to suppose that anyone can "do massage," and that the whole art can be acquired in one or two easy lessons. Applicants are often anything but pleased when they are told that it takes nearly two years to learn, and that many people from lack of aptitude or defective general education never succeed in acquiring it. I constantly see nurses and others who think they are thoroughly competent to undertake Massage, but who have not the dimmest idea even of the meaning of the word. Another very prevalent mistake is to suppose that each séance should last an hour. How this absurd idea origin-

ated it is difficult to say. In the following pages I have endeavoured to give a concise account of the Mezgerian or Von Mosengeilian system as practised in Holland and Germany, together with certain indications as to the class of cases in which it is most likely to do good. The ignorant rubber of course thinks that it will cure everything, but as a matter of fact its sphere of action is limited. If carried out under the direction of a scientific physician, who has had experience in this mode of treatment, it yields excellent results, but if allowed to drift into the hands of an ignorant empiric it soon degenerates into the most arrant quackery.

The first question which naturally arises is “What is Massage?” It is always difficult to give a definition, but I should be inclined to say that by Massage we mean a scientific mode of treating certain forms of disease by systematic manipulation. The word is, I think, derived from the Arabic *mass* or *mass'h* to press softly, the Sanskrit-root being *makch*. Possibly, however, it may have its origin in the Greek $\mu\alpha\sigma\tau\omega$ which means strickly to handle or touch, but is more commonly employed in the sense of squeezing or

working with the hands as in the manipulation of dough. It is equivalent to the Latin *pinso* to beat or pound or bray or crash. The Greek $\mu\alpha\sigma\sigma\epsilon\eta$ is met with in the Latin *massa* a substance which adheres like putty, and we have also the Spanish *mása* meaning dough. Massage is not by any means a new mode of treatment, and it is probable, as Billroth says, that the art of performing the various manipulations now embraced under this term is as old as the art of surgery itself.

CHAPTER II.

THE HISTORY OF MASSAGE.

In a primitive form Massage was known both to the Greeks and Romans, who resorted to it especially after the bath, a custom which under the name of "shampooing" stills prevails amongst Oriental nations. After the struggles of the circus it was employed to dissipate the resulting contusions and extravasations, and to restore pliability to the bruised and stiffened joints. Homer tells us that beautiful women rubbed and anointed war-worn heroes to rest and refresh them after the toil and heat of the battle. We all know the story of the Emperor Hadrian who one day seeing an old soldier rubbing himself against the marble at the public baths, stopped him and enquired why he did so. The veteran answered:—"Because I have no slave to rub me," whereupon, the Emperor pitying his condition gave him two slaves and enough to keep them. On the following day when the Emperor made his appearance a

number of old men commenced rubbing themselves against the wall hoping to have similar good fortune, but the Emperor divining their intention directed them “to rub one another.” Hippocrates says:—“A physician must be experienced in many things, but assuredly also in rubbing, for things that have the same name have not always the same effect. For rubbing can bind a joint that is too loose, and loosen a joint which is too tight.” And he adds, “rubbing can bind and loosen, can make flesh, and cause parts to waste. Hard rubbing binds, soft rubbing loosens, much rubbing causes parts to waste, moderate rubbing makes them grow.” Celsus, too, suggests the use of friction for the removal of deposits in the tissues, and especially for the relief of pain. Amongst the Chinese, written allusions will be found dating back to a period three thousand years before the Christian era, and their oral traditions are of still greater antiquity. The Chinese manuscript Kong Fau, the date of which is 3,000 b.c., seems to have contained detailed accounts of these operations. Closely allied in their nature and mode of action are the *sarchuna* of the Persians, the $\alpha\gamma\alpha\tau\rho\psi\iota\varsigma$

of the Greeks, and the *friction* of the Romans. Much useful information respecting its early history will be found in the works of Hippocrates, Celsus, Galen, Oribase, Cælius Aurelianus, and other writers both ancient and modern. Lady John Manners has contributed an admirable and scholarly historical sketch of the subject to the *Nineteenth Century* of December, 1886, and to the *Queen* of February 2nd, 1887.

Baudin, in his *Travels in New Holland*, relates that the individuals who have the greatest influence amongst the savages are the *mulgaradocks*, or medical charlatans. A mulgaradock is regarded as possessing power over the elements either to avert wind and rain, or to call down tempests on the heads of those who come under their displeasure. In order to calm a storm, he stands in the open air, spreads out his arms, shakes his mantle made of skins, and gesticulates violently for a considerable time. In order to effect a cure, he proceeds much in the same way, but with rather less noise: he practises a mode of rubbing, and sometimes hits the patient with green rods which have first been heated at a fire, stopping at intervals to let the pain pass away. The Africans

follow the same fashion ; and with the Russians, flagellation and friction by means of a bundle of birch twigs are resorted to. After the subject has been well parboiled in a vapour bath, a pailful of cold water is then dashed over him, the effect of which is described as electrifying. After this, he plunges into the snow, and thus prepares himself to endure the rigour of the climate with impunity. The Siberians and Laplanders also are said to indulge in these luxuries.

My attention has been called to a curious work entitled “A Brief account of Mr. Valentine Greatrake’s (*sic*) and Divers of the Strange Cures by him lately performed as written by himself in a letter addressed to the Honourable Robert Boyle, Esq.,” and published at the Mitre in Fleet Street in the year 1666. I have perused it with much care but cannot admit, as has been suggested, that it is an early work on Massage.

In the *Gazette des Hôpitaux*, for 1839, “La Lancette Français” as it was called, I find a paragraph headed “Massage employé dans l’île de Tonga,” in which it is stated that it is the custom when a

traveller is fatigued from walking or other exercise, to make him lie down, and then to perform certain operations on him, known as *toogi-toogi*, *mili* or *fota*. The first of these consists of striking quickly and softly with the fist, the second is a process of rubbing with the palm of the hand, whilst *fota* means pressing and squeezing the tissues between the fingers and thumb. These operations are usually performed by females trained for the purpose, and they relieve pain and fatigue, and in addition produce an agreeable effect, which predisposes to sleep. When they practice them with the view of relieving fatigue only, the arms and legs are subjected to treatment, but when the pain is localised it is to the part affected or to the surrounding parts that the procedure is applied. For headache the skin over the frontal region and the cranium generally is submitted to *fota*, and often with speedy relief. Sometimes when the fatigue is very great, they employ young children to tread under their feet the whole body of the patient. Dr. N. B. Emerson gives a similar account of the *lomi-lomi* of the Sandwich Islanders, and describes it as a luxurious and healthful form of passive motion, bestowed

by the Hawaiians as a crowning act of gracious hospitality on the honoured guest or distinguished stranger. Nordhoff in his interesting work on "Northern California, Oregon, and the Sandwich Islands," says that to be lomi-lomied you must undress and lie down on a mat. The less clothing you have on the more perfectly can the operation be performed. "To you thereupon comes a stout native with soft fleshy hands, but a strong grip, and beginning with your head and working down slowly over the whole body, seizes and squeezes with a quite peculiar art every tired muscle, working and kneading with indefatigable patience, until in half an hour, whereas you were weary and worn out, you find yourself fresh, all soreness and weariness absolutely gone, and mind and body soothed to a healthful and refreshing sleep." These are clearly but primitive methods, and have little in common with Massage as we now understand the term.

During the early part of this century there is reason to believe that the true Massage was practised in France, but it was carried on secretly, and the professors of the art were but little inclined to impart

their knowledge to casual enquirers. It is to Dr. Mezger of Amsterdam that we are indebted for much of our knowledge of the modern phase of Massage. His thesis was published in 1868, and is entitled "De Behandeling van Distorsio pedis mit Fricties." In the preface he states that he commenced studying the subject in 1853, and that he has modified it and practised it constantly since 1861. I may mention incidentally that Mezger has published no large work on the subject, and that his reputation rests chiefly on the undoubted success which he has attained in treating his private patients. He is not now connected with any hospital, and some time ago declined a Professorship in the University of Amsterdam.

It is, however, to the careful and painstaking observations of Prof. Von Mosengeil that we are indebted for an accurate and scientific knowledge of the subject. His experiments on rabbits have served to place the whole question on a firm basis, which will not be readily shaken. The literature of Massage is now so extensive that it is not possible in the space at my disposal to refer to even a tithe of the able works and articles which have from time to time appeared on

various branches of the subject. I can only mention in the most casual way even such well known authorities as Mezger, Von Mosengeil, Reibmayr, Estradère, Norström, Ilia Gopadze, Zabludovski, Benjamin Lee, and Douglas Graham. Of late the Russians have been extremely active in this direction, I have to thank Dr. Theodore Maxwell for calling my attention to several valuable papers written in their language.

In this country unfortunately very little is known about Massage. As an example of the ignorance which prevails on the subject, it may be noted that in a well-known Dictionary of Medicine, it is stated that Massage, "shampooing," "kneading," and "medical rubbing," are synonyms, and it is defined as a "process of treatment by rubbing, which consists in deep manipulations." The so-called Massage practised by "medical rubbers" and nurses is not Massage at all, as the term is understood on the Continent, and has little or nothing in common with it. In the words of the *Lancet* :—"It is as absurd to suppose that 'rubbing' and 'shampooing' is Massage as it is to say that a daub of paint is a work of art." There

was at one time a deep-rooted objection to Massage as a method of treatment, but this gradually disappeared, and it is now generally admitted that it is really a useful and scientific mode of cure, not unworthy of the notice of even the most orthodox physician or surgeon. More than ten years ago it received in Germany the adhesion and support of such distinguished authorities as Billroth, Esmarch, and Langenbeck. It is not free from the taint of quackery, but as a recent writer says:—"Quackery does not consist in the thing that is done, so much as the spirit in which it is done. The most time-honoured and orthodox remedies may be employed in such a manner, and by men boasting of the highest qualifications, as to be fairly chargeable with this taint. That we should be debarred from the use of such potent therapeutic agents as Massage, or systematic muscular exercise, or electricity, or hydro-therapeutics and the like, because in unworthy hands they have been abused, seems to me almost worse than absurdity."

As much misconception still exists on the subject, it may be as well to point out the differences between

Massage and the so-called medical rubbing. Massage, as already stated, is a scientific method of treating disease by means of systematic manipulation. The individual muscles or groups of muscles are picked out or isolated, and stimulated to contraction mechanically. The movements must be made in the direction of the muscle fibres, and the tips of the fingers must be carried along in the interstitia, so as to promote the flow of lymph and increase tissue metamorphosis. In addition an attempt should be made to stimulate mechanically the various motor points, in order that the muscles may be made to contract by a stimulus conveyed along their nerves. The manipulations are carried out systematically in definite order and with a definite object. In medical rubbing these conditions which are essential to Massage are considered to be of no importance, and the operator simply rubs or pummels the patient, without any regard to the anatomical arrangement of the parts, and usually without any very definite object. To perform Massage a knowledge of anatomy is essential, whilst for rubbing and shampooing, physical strength and endurance with a

certain knack are all that is necessary. Shampooing is very useful in its way, but it is not Massage, and can never take the place of Massage. There is as much difference between Massage and shampooing as there is between playing a difficult piece of music and striking the keys of the pianoforte at random. The Weir Mitchell treatment of neurasthenia and hysteria is a combination of isolation or seclusion, rest, electricity, overfeeding, and "Massage," the term Massage being employed, not in its original sense, but simply as a synonym for rubbing. Dr. Playfair's system is I believe identical with Weir Mitchell's, and is applicable to the same class of cases. Dr. Playfair tells us that Massage in the sense in which he uses the term is "nothing more than a vicarious way of giving exercise to patients who cannot take it themselves." In a recent communication to the *Lancet* he states that practically he has never himself seen Massage employed, and does not care how it is done. The Zander system has nothing to do with Massage, but aims at curing various ailments by mechanical exercises, machines more or less complex in structure being employed for the purpose.

Some years ago before I knew anything of Massage, I frequently sent patients to the Zander institution, and had every reason to be satisfied with the results of the treatment. I remember one case in particular. A boy at one of our large public schools, who as the result of much good living, including a plentiful supply of port wine, and very little exercise, had a sharp attack of gout. As soon as the acute symptoms subsided, I set him to work at some of the heavy machines and speedily cured him. A boy about twelve who some years previously had had infantile paralysis, was also materially benefitted by this treatment. In the selection of the machines and other points of detail, I was materially assisted by the then medical officer to the establishment.

The term Massage is often employed in a manner which clearly indicates that no definite idea has been formed of its meaning. Here for example is an extract from an article entitled "Massage by Machine," which recently appeared in a well-known American Journal:—

"From a big room on the second floor at No. 45 Randolph Street, above a wholesale grocery store

and next to the apartments occupied by the Ethical Society, a noise comes forth all through the day which reminds the listener of the click of the looms in a cotton factory. If the person who hears the noise enters the room to investigate, a strange sight meets his gaze. A dozen machines, run by a steam engine in one corner of the apartment, rattle and click in a monotonous way, and in the embrace of each is a human being, who is being shaken, kneaded or rolled for the improvement of his health. There are several machines which have what can only be described as two rubber pads on the end of an iron stem extending out from them. These pads may be said to represent a human hand in motion, shaking horizontally, with about one hundred and fifty movements to the minute. The patient sits on a chair and places any portion of his body to the rubber pads. They take hold and shake with a vigorous, even motion, clutching the clothing, skin, and muscles like the hand of a living person.”

It is hardly necessary to say that this is not Massage, and is not a bit like it.

I am afraid that the true Massage will never come

into general use in this country. There are of course hundreds of people who pretend that they practise it, but as a matter of fact nine-tenths of them have never been properly trained, and know nothing about it. There is as much difference between Mezger's Massage and the so-called English Massage, as there is between champagne and gooseberry. The difficulty is that the majority of people do not know one from the other, and most patients are perfectly satisfied as long as the rubber gives them a full hour, works hard, and gets hot and a little "dewy." Fine work and the isolation of individual muscles, or groups of muscles, is at a discount, whilst motor points are almost unknown quantities. Of course the after effects, the results of the treatment, are not the same, but people do not find that out until the mischief is done, and they are disappointed and disgusted.

I was recently informed that Mezger's Massage was practised at a well-known health resort in this country, a skilled *masseuse* having been obtained straight from Aix-les-Bains. As the system pursued at Aix is not Mezger's, and has little or nothing in

common with it, I fail to see the force of the recommendation.

CHAPTER III.

THE METHOD OF PERFORMING MASSAGE.

Now as to the method of performing massage. In the first place it must be understood that there are several different kinds of massage, or perhaps I ought rather to say, that massage comprises several distinct modes of procedure. As a well known writer says “tous les massages sont des manipulations tandis que toutes les manipulations ne sont pas des massages.” Massage is the generic term which includes the other specific forms. The terms used for the different varieties of massage are, it will be seen, of French origin. They are in common use both in that country and in Germany. They are very old and were employed ages ago, when massage flourished in France.

We begin then with what is called *effleurage*. This is a stroking movement made with the palm of the hand passing with various degrees of force over the surface centripetally. It is of little value in itself but produces good results when combined in various

ways with the other procedures to be presently described. It is essential that the movement should be as much as possible in the direction of the muscle fibres. It should never degenerate into mere rubbing. Every "movement" begins and ends with an effleurage performed quickly and perhaps forcibly. For deep seated tissues the knuckles may be used instead of the palm of the hand. Beuster, of Berlin, describes *effleurage* as consisting of "slow gentle strokes in a centripetal direction along the course of the veins and lymphatics made with the palm of the hand and with the pressure intermitting so as to cause passive peristaltic action." Jacoby says "the volar surface of the ends of the fingers or of the entire hand having been applied to the part at a point situated more peripherally than the affected portion, is then pushed centripetally forward and a short distance beyond the part. When this hand has reached its destination the other hand is placed at the starting point, and the same movement executed. Meanwhile the first hand has been brought back, so that by the time the second one has fulfilled its purpose it is ready to begin again. This is then

repeated with regularity. The time to be devoted to each stroke will vary much, the strokes also following with more or less rapidity."

Next comes *pétrissage* which is more important and is by no means easy to acquire. It is this procedure above all others, as Lee, of Philadelphia, has pointed out, by which we act upon the circulation of the deep-seated parts and modify the processes of tissue metamorphosis. "It is a powerful excitant to the capillary circulation, and stimulant to secretion, and an awakener of dormant nervous energy." It consists essentially in picking up a portion of muscle or other tissue with both hands, or the fingers of one hand, and subjecting it to firm pressure, rolling it at the same time between the fingers and the subjacent tissues. The hands must move simultaneously, and in opposite directions. It will be observed that the thumb and fingers are wide apart, and that the whole muscle is taken up between the fingers and firmly pressed and rolled. The movement is made from below upwards, and the parts are squeezed in much the same way that one would squeeze out the contents of a sausage. Professor Von Mosengeil always

impresses on his pupils the necessity for “working upstairs,” that is from the extremities towards the centre of the body. The skin must move with the hands or the operation is a painful one for the patient. What one hand misses the other takes up so that all the tissues are subjected to the influence. It is of importance to proceed uniformly and not to jump from spot to spot. To do this well it is essential to remember the arrangement of the groups of surface muscles, and to keep well in the interstitia. It is hardly necessary to say that it would be useless to attempt *pétrissage* of the hard tissues such as the bones. You will often see a nurse trying to squeeze up the ridge of the tibia under the impression that the bone is a muscle.

The next process is *friction* or *massage à frictions* which is performed with the tips of the fingers, and is employed chiefly in the treatment of affections of the joints. To quote Beuster again:—“The finger-tips of one hand held at right angles to the axis of the limb rub across and across in narrow ellipses while the fingers of the other hand stroke parallel to the axis of the limb.” The term is a bad one for it

has nothing to do with what we ordinarily understand by friction. It is always associated with effleurage, and it must be performed quickly and with considerable facility or it is well nigh useless. It is useful not only for treatment but for the purpose of diagnosis.

Tapotement is a kind of percussion which may be made with the tips of the fingers, their palmar aspects (*les tapotements de Laisné*), the palms of the hand, the back of the half-closed hand, the ulnar or radial border of the hand (*hachures, hackungen* of Neumann), or with the hand flexed so as to contain when brought in contact with the surface of the body a cushion of air. In exceptional circumstances *tapotement* may be indirect, a bundle of swan's feathers lightly tied together being employed for this purpose, but this is now rarely resorted to by the best operators.

In some cases digital pressure on the motor points or the trunks of the nerves—the median, ulnar, internal popliteal, and the supraorbital for example—will give good results especially in the relief of pain.

There are other varieties of massage such for example as different forms of vibration—very useful for constipation—but these it is hardly necessary to describe in detail, in fact, it is almost impossible to teach the art of massage by written or verbal description. It is very much as if one were trying to make a pianoforte player by describing how it is done without recourse to the instrument. Massage is undoubtedly difficult to learn but it can be acquired by dint of constant practice, and after a time becomes almost a second nature. There are several little points of detail to which attention must be paid. The massage should be “dry” that is without the use of oil, or liniments, or ointments of any kind. This is contrary to the teaching of Busch and other writers, but a little experience soon serves to show which method yields the best results. The only exception, or almost the only exception, to this rule is when the patient suffers from some form of specific disease, when the operator should use an antiseptic preparation, carbolic acid or oil of cloves and lard for example—for his own safety and protection. The less ointment one uses the better, and it must be remem-

bered that vaseline is never admissible. Scrupulous attention must be paid to the condition of the hands and nails. The hands should be soft, and the nails short. A few months ago Prof. Liebreich, of Berlin, advised me to try Lanoline, the newly discovered wool oil and basis for ointments. I have used it in several cases, and although it is undoubtedly infinitely superior to vaseline and other petroleum fats I prefer dry rubbing, and am sure it is a mistake to employ lubricants of any kind. Dry rubbing is to be preferred for the following reasons:—(1) You get better contraction of the muscles and consequently a greater flow of lymph; (2) electrical currents are more readily developed in the tissues; (3) there is a greater elevation of temperature in the part; (4) you do not make your patient in a mess. There is not the slightest fear of causing abrasion of the skin in dry rubbing if the operator knows his work. The rubber who rubbed a hole in his patient because there was no vaseline had mistaken his vocation. I do not deny that inunctions are of value in suitable cases, but that is entirely another matter and has nothing to do with Massage.

Many special preparations are recommended for keeping the hands soft and white, but it is hardly necessary to resort to them. A little ammonia or borax in the water in which the hands are washed may be useful. At night the best mixture for the hands is white of egg mixed with a grain or two of alum. The so-called Roman toilet paste is a mixture of white of egg, barley flour, and honey. Simple oatmeal would in all probability do just as well, but the best way of keeping the hands smooth and white and fit for massage is never to do anything which would make them rough or dirty.

In some parts of the Continent massage is employed alone, whilst in others it is associated with electrical treatment. Von Mosengeil, in addition, to being an authority on Massage, is a thoroughly practical electro-therapeutist. In suitable cases he employs both the constant and the interrupted current, placing one electrode on some neutral spot, and the other on the various motor points in succession. In some cases—headache for example—static electricity is employed, sparks being taken from the painful spot. Static electricity, so long

discarded as a therapeutic agent, is now employed by many physicians in the treatment of hysteria, hypochondriasis, and allied conditions.

CHAPTER IV.

THE MASSEUR AND THE MASSEUSE.

THE next point for consideration is, who should do the Massage? It would be absurd to suppose for one moment that so delicate a duty could be entrusted to an untrained or uneducated person. Both Mezger and Von Mosengeil are their own operators. For women and children it is essential to obtain the services of a thoroughly accomplished *Masseuse*. She must be an educated lady—I use the word advisedly—who has been thoroughly trained in the different methods, a process which will occupy at least two years. She must have such a knowledge of surface and visceral anatomy and of physiology, as will enable her to carry out the instructions of the physician intelligently. It is not necessary that she should be physically strong, aptitude and intelligence being of far greater importance. She must be a woman of refinement, and the possession of a certain sympathetic temperament will greatly enhance the

value of her services. I quite agree with Dr. Benjamin Lee, who, in speaking of the choice of a manipulator, says: "He or she, for both sexes may succeed admirably as *masseurs* or *masseuses*, must possess firstly, vigorous health; secondly, muscular strength; thirdly, a cheerful temperament, a pleasant face, and an acceptable manner; fourthly, a soft and pliant but strong hand; fifthly, a fair education and a certain amount of refinement; sixthly, a knowledge of the leading facts of anatomy, such as the position of the various organs, the position and course of the larger arteries, veins, and nerves, and of such facts in physiology as the functions of the various organs, the course of the circulation, and the general processes of nutrition; and, seventhly and lastly, an acquaintance with the effects produced by the different forms of manipulation, the order in which these different forms should be employed to produce certain general effects, the injury which may be inflicted by employing them improperly or out of their proper order, and a practical dexterity in their application, to be attained only by training under an experienced instructor. Hence it will be understood

that we cannot take John from the stable, or Biddy from the wash-tub, and in one easy lesson convert either into a safe, reliable, or efficient manipulator. Massage is an art, and, as such, must be acquired by study and patient practice under competent guidance.” The necessity for obtaining educated people to perform massage is as yet hardly recognised in this country. A short time ago on asking a medical friend if he used massage much in his practice he replied:—“Oh yes, a great deal, my butler does it.” After that I should not have been at all surprised to hear the electrical treatment was conducted by his footman, and that the kitchen-maid undertook the obstetric cases. Since the publication of the first edition of this book, I have received on an average a dozen letters a week from people expressing their readiness to undertake cases of Massage for me. I have been favoured with calls from nearly a hundred young ladies all more or less attractive—and incompetent. When I venture to point out to them that it is desirable that they should have at least an elementary knowledge of the subject, before undertaking the treatment of the sick, they uniformly resent the

insinuation, and some of them I am sorry to say, have expressed their feelings in language more forcible than polite. They generally end up by saying that they are "quite sure" that if I would only just show them how it is done, they would "pick it up" in no time. They are not as a rule wanting in confidence, and tell me that if I would just give them "one trial" they would afford my patients every satisfaction. They are willing enough to undertake any case, and it is a matter of indifference to them whether the victim is a man, woman or child, provided only that there is a fee attached. A few of them have taken my advice, and have abandoned a task for which they are hopelessly unsuited, but the majority having nothing in the world to do, and finding home-life monotonous are infatuated with the desire to treat other people and make a fortune. They usually come armed with a certificate or two, and with elaborate testimonials from partial friends, who would willing vouch for their fitness to undertake anything in the world. It is an unpleasant task to have to decline their offers of assistance especially when the appeal, as is so often the case, is made in *formā pauperis*; but one cannot forget that one

has a duty to perform to one's patients as well as to the would be *masseuse*. It is just as difficult to learn Massage in a few easy lessons, as it is to become a *prima donna* by this simple means. Skilled labour as in all callings commands its price, but for the untrained and incompetent there is no demand. I am always willing to try and help those who have had the requisite education, but I cannot undertake to find work for the enormous army of unemployed to be met with in a large city like London. Most of these people have not the dimmest idea of what is meant by punctuality, and are just as incapable of keeping an appointment as they are of writing a decent letter. I am sorry to say this, but it is true. The so-called massage practised in some of the hospitals, and under the auspices of some of the nursing institutions, is a painful exhibition of ignorance and incompetence, being simply a degenerate form of rubbing or shampooing. Both are useful enough in their way, but they hardly rank as scientific therapeutic agents. The art of Massage depending as it does on a knowledge of Anatomy and Physiology, takes many months to acquire, and the only plan at all

feasible is to train one's own operators. It may not be necessary for a *masseuse* to study Comparative Anatomy or even Topographical Anatomy, but it is essential that she should attend lectures on Plastic Anatomy or the Anatomy of External Forms, and this cannot be done in a week or in a month. It is of no use for me to tell her that she must perform effleurage of say the trapezius in the direction of its fibres, if she has no idea whether that muscle is situated in the back or in the sole of the foot. To work efficiently she must carry in her mind's eye the arrangement of the structures beneath the skin, and if she is not able to do this she is no better than a common shampooer. For some cases first class work may not be essential, but those are not the cases which test the efficacy of this mode of treatment. A short time since a gentlemen stated in one of the medical papers, that it might be learnt in a few easy lessons, "like fly-fishing, tennis and cricket," but as it appeared that he had no practical knowledge of the subject and that his views, to say the least, were somewhat hazy, the assertion may be allowed to pass without further criticism. The state-

ment made by the *Lancet*, that “skill in the proper performance of Massage takes at least two years to acquire,” is correct. Compare the analogous case of billiards. You see a man knocking about the balls in the billiard-room of a country inn. You ask him how long it takes to learn, and he will offer to teach you in half-an-hour for the smallest possible consideration. Go to a champion player and ask him how long he took to learn, and he will tell you that he has been at it all his life, and has to work hard to hold his own. It is all very well to talk about “natural aptitude,” but in Massage as in everything else, good results mean hard work and plenty of it. Any one can rub mechanically, but that is of no earthly use; a *masseuse* must work with her brain as well as with her hands. If Massage is worth doing at all it is worth doing well, and knowledge cannot be picked up without trouble or acquired in a day.

The duration of the *séance* is another point of great importance. The whole operation should not occupy more than from ten to fifteen minutes, and many authorities think that four minutes is

quite enough. In recent cases these short sittings should be frequently repeated, say three or four times a day, but in chronic cases such frequent meetings are not essential. There seems to be a general impression that massage should be suspended during the menstrual periods, but this I think is hardly necessary. It is desirable that the patient should, if possible, come to the operator, for it is difficult to work effectually when tired with a long journey. The morning is by far the best time for massage. It is never a good plan to employ a person who is uncongenial to the patient or who has damp and clammy hands. It is necessary to exercise as much care in the selection of a *masseuse* as a doctor usually bestows on the choice of a wet nurse for a child. No one suffering from any constitutional disease or ailment should be considered eligible. Not long ago a medical man sent me an individual for whom he begged me to find employment as a *masseur*. On enquiring how he had known the doctor he said he had been under his care for syphilis. I did not employ him. The patient must have confidence in the treatment and in the operator. It is useless

to attempt massage in the face of persistent objection on the part of the patient, or the patient's friends. It is sometimes stated that patients should rest in bed for an hour after each *séance*, but I never find this necessary, on the contrary, I think the sooner they go about their business the better. It is difficult at first to make people understand that if ten minutes' massage will do them good, twenty minutes will not prove twice as efficacious. Such, however, is not the case. An observation by Reibmayr may serve to impress this on the memory. He subjected a dog to massage for a few minutes and found that the pulse rose from twenty-four to sixty-four. He then continued the manipulations for some time longer and the pulse quickly fell to thirty-six. Nörstrom says:—"La durée des séances sera de cinq minutes ou à peu près; dans les cas chroniques on en fera une ou moins par jour; dans les cas aigus il en faut deux de dix minutes ou davantage;" but an expert *masseuse* from whom I have derived many practical hints, assures me that half an hour is not too much for a case of infantile paralysis. I always tell my patients that

they must have one day's rest during the week, preferably on the Sunday. It must be remembered, however, that the same method of treatment with respect to details is not applicable to all cases. Each case must be taken on its own merits, and it is here that the special skill and knowledge of the physician come into play. Massage is a powerful therapeutic agent, but if improperly employed, or if used in unsuitable cases, it may do a great deal of harm.

The terms used to designate those who practice Massage and the words employed in describing the different methods and processes, are, as Dr. Charles K. Mills, of Philadelphia, points out, somewhat awkward for English speaking people. "The proper term for a male operator is *masseur*, for a female *masseuse*, the plurals being *masseurs* and *masscuses*. The verb which expresses the performance of the procedure is *masser*. It is therefore proper to speak of a patient as being *masséed* or of *masséeing* a patient. I certainly would not advise you to speak either of *massageing* or *massacreing* a patient. The latter is certainly expressive in describing the violent performances of some of the untrained exponents of the art."

Some months ago my attention was called to an article on "Massage and Morals" in a well-known Society Journal. The author writes forcibly and is evidently well acquainted with the subject. He says: "I have heard more than one complaint of the conduct of their manipulators from ladies who have been advised by their doctors to try the massage cure, and, knowing something about the matter from statements which have been volunteered to me by men of practical experience, I have since made certain enquiries, the results of which demonstrate that about one half of the so-called surgical massage that goes on is, in reality, nothing of the kind. It is simply and entirely a misleading system, which ought to be well investigated by the husbands, wives, and friends of those who by order of the doctor or from their own choice place themselves for treatment in the hands of the professional advertising masseurs. It is right that people who may be recommended by their medical attendants to resort to massage, should know the individuals into whose hands they are liable to fall; and although I cannot here print all that has come to my knowledge with respect to the practices of the

objectionable section of the fraternity, I intend to give some account of what I have learnt."

A description then follows of the practices pursued in the establishment of a certain professor, and the article concludes with the following words:—

"At some of these establishments the so-called cure is carried on in large rooms, where the female patients congregate together and perform rather after the manner of athletes at a gymnasium than sufferers in a doctor's reception-room. Not unlike the outer chamber of a Turkish bath, the women lie about on couches, or straddle wooden horses, meanwhile discussing at their leisure with the German male attendants the possible efficacy of the professor's cure."

I was inclined at first to think that the account was somewhat exaggerated, but from what I have heard since, from various sources, I am satisfied that it is correct, and if anything understated. The practical conclusions to be deduced from a perusal of the article are:—

- (1) That massage should never be resorted to unless under medical advice and superintendence.

- (2) That no medical man should permit his patients to remain under the care of any advertising rubber or "professor."
- (3) That under no circumstances should a lady or child be treated by anyone but a well-trained and reliable *masseuse* who should act under the direction of the medical adviser.

CHAPTER V.

THE PHYSIOLOGICAL ACTION OF MASSAGE.

RESPECTING the physiological action of Massage, it is necessary to speak with caution. Here, as is so often the case, practice has preceded theory. The art of massage has been acquired, but we know little of its mode of action. We find that we cure our patients, but hardly know exactly how these results are obtained. It is easy to theorise, but we want carefully observed facts and accurately recorded experiments. Fortunately we have something to guide us, and we turn with pleasure to the pains-taking observations of Gopadze, Zabludovski, and Von Mosengeil. Dr. Gopadze's experiments were made on four medical students who were kept in the hospital, and subjected to systematic massage for twenty minutes or more daily. The operation commenced with effleurage beginning at the extremities and working upwards. This was followed by pétrissage, friction and tapotement, ending up with a

second effleurage. In each case the appetite was decidedly improved, the patient—or victim—taking more food than usual, not only during the week that the operations were performed, but during the subsequent week as well. The amount of nitrogenous transformation during the continuance of the massage was augmented in all four cases, and the quantity of nitrogen assimilated was increased independently of the food taken. In the massage week two of the subjects gained slightly in weight, whilst the other two lost, but in the week following that in which massage was resorted to, all four gained notably. It was found that the temperature in the axilla fell for above half an hour after each rubbing, but never more than half a degree. It then rose steadily, and an hour later resumed the normal or perhaps remained the fraction of a degree lower at the commencement of the *séance*. The respirations were always increased in frequency, and were deeper and fuller. The effect on the pulse varied with the kind of massage employed. With surface effleurage carried on lightly, the pulse became more frequent, but under the influence of pétrissage it was rendered

slower. In both cases, however, it was fuller and the effect persisted for an hour or even longer.

Zabludovski's observations were made on himself, his house-keeper and his maid-servant, and lasted for eighteen days. He noticed that there was a general improvement in bodily vigour, and that mental activity was greatly increased. The appetite too improved, and they all slept well at night. The massage of the abdomen proved most efficacious in promoting the action of the bowels.

Dr. Ivan Stabrovski's paper on the "Influence of Massage on the Exhalation from the Lungs and Skin," published in the form of a thesis at St. Petersburg, is a sound bit of work. The experiments were carried on in the wards of Professor Manasseïn, the distinguished editor of the *Vrasch*. Of the fourteen patients on whom observations were made, nine were in good health whilst the remaining five were convalescent from various acute illnesses. Each series of experiments continued over a period of ten consecutive days, each séance lasting an hour. Curiously enough the results seem to have been somewhat discordant if not absolutely contradictory.

In five cases there was an increase in the pulmono-cutaneous exhalation and a diminution in the quantity of urine. This increase occurred shortly after the massage, so that when this was practised in the morning the perspiration was increased during the day, but became normal during the night. Similarly the quantity of urine fell during the day and rose again at night. In the remaining six cases both the urine and the exhalation from the skin and lungs were increased during the period of massage.

Dr. Eccles in a paper presented to the Royal Medical and Chirurgical Society of London, has shown that *effleurage* stimulates the skin muscles, produces dilatation of the superficial vessels and insensible perspiration, excites the skin reflexes, and acting through the cutaneous nerves, increases the rapidity of the circulation and heart's beat. *Pétrissage* forces the lymph out of the muscles, increases the velocity of the blood current through the part, temporarily decreases the size of a limb and increases its muscular power. The pulse-rate is reduced especially in *pétrissage* of the abdomen. *Massage à friction* produces the same local effect as *pétrissage*, whilst

Tapotement excites muscular contractions. By a combination of all these procedures the texture of the skin is improved, the sense of locality is increased, and the general body temperature is raised. The free surface temperature of a part under massage is higher than that of the rest of the body, whilst abdominal massage decreases the surface temperature of the extremities. A course of massage of a month's duration should increase the body weight, the appetite, muscular strength, and ability to sleep and work well. The observations are of value in confirming the conclusions of previous workers.

Professor Von Mosengeil's experiments are of the greatest interest. He took a number of rabbits and injected into the knee-joints a syringeful of Indian ink. Massage was performed at intervals on the right knee, but the left was left untouched. At the expiration of twenty-four hours or more the animals were killed, and the tissues on both sides were carefully examined. The left knee-joints were distended with fluid, whilst on the right side which had been manipulated it had entirely disappeared. The lymphatic glands on the right were full of particles of

Indian ink, whilst the corresponding glands on the untreated side remained unaltered. The differences were so marked as to be visible to the naked eye. The conclusion arrived at as the result of these, and a number of similar observations, was that massage promoted absorption by the lymphatics. It is probably in this way that effusions and other morbid products are removed. Another fact observed by Von Mosengeil was that massage raised the temperature of the limb or part operated on, a fact susceptible of easy demonstration. This was at first thought to be purely mechanical, the result of the friction with the hand. It was noticed, however, that it was quite as marked after *pétrissage* as after *effleurage*, and it was found too that this elevation of temperature was not merely temporary, but lasted for some hours. It was so marked as to be appreciable, not only to the thermometer but to the touch.

It is obvious that massage increases the circulation through the part, and this probably explains its efficacy in hastening the union of fractured bones, a fact now well established. The elevation of temperature in some recent experiments was found to be

from three to four degrees, and in infantile paralysis, according to Professor Weir Mitchell, it is often from six to ten degrees. It is probable that effleurage of the surface lightly performed, contracts the superficial blood vessels locally, whilst deep and persistent effleurage combined with pétrissage dilates them. The redness of the surface observed after a few minutes pétrissage has long been recognised, and this may to some extent explain the beneficial effects of massage in infantile paralysis. As already shown, the nutrition of the parts is maintained until new cells in the cord take on the function of those which have been destroyed.

It is well known that massage increases the electrical contractility of muscular tissue. Zabludovski has shown that kneading restores the contractile power of muscles exhausted by the rhythmical application of maximal induction currents, whilst simple rest without massage has very little restorative effect. This point can easily be demonstrated on the human subject. Professor Von Mosengeil applied an electrode to one of my motor points—it was the external popliteal nerve if I remember rightly—and then

gradually reduced the strength of the current, until it failed to produce any contraction in the muscles ; he then masséed the limb for two or three minutes, after which the current which had previously failed to elicit a response, produced vigorous contraction. Douglas Graham, of Boston, states as the result of his observations, that muscles respond more readily, more vigorously, and more agreeably to the Faradic current after massage, than they do before, especially if they are somewhat deficient in contractility. It would seem that massage exerts an action similar to very complete and perfect circulation through the part, in removing waste products, and restoring muscular power. It is probable that it is by stimulating the circulation, and increasing the supply of blood to the part, that it promotes the union of bone after fracture. Reibmayr has shown that as the result partly of the development of surface heat and partly of the friction, delicate electrical currents are developed in the tissues themselves. Zabludovski demonstrated this experimentally ; he found too that a man who could lift a weight of one kilo at intervals of one second, by flexion of the elbow joint, from a

table on which the fore-arm rested horizontally, was enabled after the arm had been masséed for five minutes, to lift it in the same way over eleven hundred times. The work was performed with less difficulty, and gave rise to very little pain or sense of fatigue.

There can be but little doubt that massage exerts much of its beneficial effect by stimulating the flow of lymph in the lymphatics. This explains its use in hæmorrhagic effusions, and throws light on its mode of action in promoting absorption of tissue round chronic ulcers. The manipulations exert some influence mechanically, which is facilitated by the arrangement of the valves permitting the passage of lymph in one direction only, and in addition the contraction of the muscular fibres has much to do with the production of the effect. When the muscle fibre is stimulated mechanically to contract it shortens and thickens, and the lymph in the spaces immediately surrounding it is driven onwards. There seems to be a general consensus of opinion in Germany, that this is by far the most important factor in the production of the good effects, witnessed in many cases of disease treated by massage.

Dr. Graham in a recent article says:—"I have so often observed an increase in the quantity of the catamenia, and an earlier appearance than usual in women, who are to all intents and purposes well, and who have had massage of the back or general massage for some slight ailment, that I have finally come to regard this as one of the physiological effects of massage. Even massage of a leg for a joint or muscular affection is frequently followed by an earlier appearance and a longer stay of the monthly visitor."

It has been suggested that possibly massage may in some cases exert a beneficial effect by getting rid of or dispersing—to use a popular expression—certain deposits or thickenings in the muscular and other tissues. Dr. Walter Johnson says:—"If any surgeon or physician who has not hitherto had his attention directed to this point, will manipulate the flesh of his patients, he will be surprised to find in how many cases he will detect thickenings, hardenings, and swellings in various parts. He will find the necks of nearly all his patients who have suffered for any length of time from head affections swollen

and indurated, with most probably enlarged absorbent glands in the neighbourhood. The neck and shoulders will frequently be tender to the touch, and the muscular and other fibres will be dry and will crackle perhaps on pressure. He will notice a similar condition of the shoulders and upper part of the back in asthmatic patients particularly, and he finds the long muscles of the back very much disordered, in many chronic diseases affecting the stomach, liver, kidneys, etc. The arms and legs will on examination present swellings and hardenings and thickenings, accompanied by swollen glands in a multitude of patients." The credit of this observation is assigned to a certain Mr. Beveridge, who many years ago practised as a rubber in Edinburgh, and the existence of these indurations has been confirmed by Norström, Henschen, Vretlind, and other writers. Beveridge we are told, found that they could be dispersed by friction, and that coincidentally with the removal of these deposits as they were called, the patient's health materially improved, and sometimes chronic diseases of long standing were cured. A young gentleman, the son

of a wealthy merchant, was for many years subject to epileptic fits, and was treated in vain by the most eminent physicians, both in Edinburgh and London. At last he was cured by Mr. Beveridge. Beveridge discovered a crop of deposits, rubbed them away, and the lad got well. Dr. Johnson says:—"I knew the young gentleman, and I knew his parents, and there is no doubt of the truth of this statement." The theory about the deposits may not be worth much, but still empirical observations such as these deserve consideration.

The value of friction in maintaining the health, is referred to by many writers of repute. Lord Bacon for example points out that "frictions make the parts more fleshy and full as we see, both in men and in the currying of horses. The cause is for that they draw greater quantity of spirits and blood to the parts, and again because they draw the ailment more forcibly from within; and again, because they relax the pores and so make better passages for the spirits, blood, and ailment; lastly because they dissipate and digest any inutile or excrementitious moisture which lieth in the flesh; all which help assimila-

tion." This may not be quite in accordance with our modern views of pathology, but still it is extremely interesting. Sir William Temple writing on "Health and Long Life," says:—"Friction is of great and excellent use and of very general practice in the Eastern countries, especially after their frequent bathings; it opens the pores, and is the best way of all forced perspiration; is very proper and effectual in all swellings and pains of the joints, or others in the flesh which are not to be drawn to a head and break."

CHAPTER VI.

MASSAGE IN PARALYSIS.

WE have now to consider the class of cases in which massage is most likely to prove beneficial. It is by no means easy to say in what diseases it is most useful. Unfortunately its employment has been advocated in the treatment of many complaints for which it is essentially unsuited. Accurate diagnosis is of the utmost importance, so that the sphere of usefulness of this remedy may with increased experience become more accurately defined.

I will begin with INFANTILE PARALYSIS because it was in the treatment of this sad affection that my experience of this method of treatment was first obtained. The history of these cases is only too familiar to most of us.

A child—a bright, happy, intelligent child—is put to bed one night with little or no indication of illness, or at the most suffering from some slight ailment, and in the morning wakes up paralysed and a cripple. The little girl who only yesterday could run and

jump and dance with the best of them is now a helpless invalid, tied to her couch and incapable of the slightest movement. If you examine the legs—for they are the limbs most frequently affected—what do you find? They are deadly cold, there seems to be but very little life or circulation in them, reflex action is abolished, and not unfrequently they are exquisitely tender to the touch. The child tries to move, but her best efforts are in vain; she has no more control over those palsied limbs than if they belonged to an inanimate object. The physician after a few days applies his electrical tests, and points out that both nerves and muscles refuse to act. In poliomyelitis anterior acuta, as we technically call the disease, the excitability of the nerves to the Faradic current begins to diminish about the third day from the commencement of the illness, and by the end of the week is gone, perhaps never to return. On the application of galvanism to these nerves there is no response, but placed directly over the muscles themselves it is found that there is increased excitability, a feebler current than in health sufficing to cause contraction. After a time this excessive irritability

passes away, and it is impossible to obtain any response with either form of electricity. The outlook is indeed bad, and the ultimate chances of recovery are small, unless recourse be had to some special mode of treatment. It must be remembered that all this has come on suddenly, possibly without any warning or antecedent illness of any kind; or it may follow in the wake of measles, scarlet fever, whooping cough, or one of those apparently trivial febrile disturbances which are so common in children, and for which we ordinarily do so little. Sometimes there may be a fit or an attack of convulsions, but this is not usually the case. Even when the paralysis to some extent passes away, one or two muscles or groups of muscles fail to perform their accustomed functions; and the child, even if able to get about, walks with a limp and is a cripple for life. As Professor Erb points out, club-foot, loose joints with dangling limbs, and extreme degrees of spinal curvature nearly always owe their origin to infantile paralysis. "The shrunken, paralysed, crippled members, hideously distorted, incapable of use, constitute a burdensome appendage to the body rather

than an integral part, and present a striking contrast to the healthy, well-developed, and well-nourished limbs."

The general mode of treatment to be adopted has already been sufficiently indicated in the lecture to which I have already referred (*Lancet*, Dec. 26, 1885). In essential paralysis, as we have already seen, the legs or at all events the affected members are always cold, and the muscles react but feebly to the electrical current. By systematic massage an improvement is speedily effected. We resort chiefly to *pétrissage* associating it of course with *effleurage*. Both processes must be centripetal, working upwards from the extremities. The sittings should be at first of short duration and frequently repeated, say three or four times a day, but in chronic cases twice a day will suffice. The first effect noticed is that the limbs become much warmer, and this is not temporary, but lasts for some hours. Then it is seen that the susceptibility of the muscles to the electrical current is greatly increased, so that they contract at once after a few minutes massage to a stimulus which would otherwise exert not the slightest effect. During the

last six years I have had a large number of cases of this description under observation, and in every instance in which the treatment was carried out actively and systematically the best possible results were obtained. Many of them were of many years standing, and some remained under treatment for many months. Two patients have been under observation for over four years, and from being helpless invalids have grown into bright, active, happy children. Electricity is most useful as an adjunct. One electrode—the cathode—is applied to the spine about the tenth dorsal vertebra, whilst the other is placed over the various motor points. The weakest currents are employed, and contraction may be obtained by opening and closing the current from time to time. Shocks of any kind are quite inadmissible, and the application should never be permitted to cause the child pain. It is a good plan to search for tender spinal processes, and this applies equally to many other forms of paralysis. A big sponge to the head and the passage of a weak constant current is useful, especially if there be much contraction of the limbs. I see no objection to the employment of such accessory

treatment as pine-extract baths, salt-water baths, rabbit-wool stockings, and the administration of cod-liver oil, extract of malt, and the beef and iron wine. In comparatively recent cases the prognosis is essentially good, but in old-standing cases one has to be cautious in expressing an opinion.

In other forms of PARALYSIS massage is equally efficacious, and benefit will be experienced from its employment in pseudo-hypertrophic paralysis, facial paralysis, wasting palsy, and allied conditions. It answers admirably in cases of paralysis of single nerves. One of the first of these cases treated by this method was a paralysis of the muscles supplied by the musculo-cutaneous nerve, a somewhat uncommon condition. The patient had had a fall on his shoulder resulting in the formation of an abscess in the axilla. This ran a chronic and somewhat indolent course, and little by little the patient lost the power of flexing his forearm, the other movements of the upper extremity remaining unaffected. On examination it was found that the biceps and coraco-brachialis were completely paralysed although no anæsthesia over the region supplied by the cutaneous branch of

the nerve could be detected. At the beginning of the second month when the patient was first seen, the muscles failed to act to the Faradic current but they contracted well on the application of a slowly interrupted constant current. Massage was recommended and six week later it was reported that the patient had greatly improved, and had almost regained the lost movement. In paralysis of the musculo-spinal nerve not due to chronic lead poisoning—a much more common complaint—equally good results are obtained. In writers' cramp and especially dancers' cramp it is an excellent mode of treatment. The spasm of the muscles of the legs from which *danseuses* so frequently suffer is often cured by a single application. Zabloudovski has recently published in the *Vrasch* a number of cases of violinists' cramp treated by this method. Dr. Vivian Poore in a lecture "On certain conditions of the Hand and Arm which interfere with the performance of professional acts especially Piano-Playing," speaks highly of the value of Massage in these case but warns us against its employment as long as the nerve-trunks are tender, for under these circumstances it may do harm rather

than good. He adds that as the professional *masseur* is not infrequently over-zealous, and the mere passive action of being rubbed is very exhausting to the patient, we must be careful that the massage is neither too long nor too vigorous. With this proviso, "if massage be reasonably and sensibly carried out, it is undoubtedly of great value." The success obtained in some forms of writers' cramp by a modified process of massage is well-known. Douglas Graham thinks that in many cases it is capable of "fulfilling therapeutical indications of the utmost importance, such as the removal of increase and decrease of resistance in the paths of conduction, excitation, and motion; restoration of harmonious co-operation of individual movements of natural conductivity and excitability, as well as of muscular sense and muscular effort, in a word correction of under-action and over-action of muscles, nerves and their central reflex apparatus." All writers are agreed as to the enormous benefit which may be effected by massage in hysterical paralysis. In cases of hemiplegia due to cerebral haemorrhage, massage may be useful in maintaining the condition of the muscles, and arresting those unpleas-

ant startings to which many paralysed or partially paralysed persons are liable, but it can hardly be expected to effect a cure. In all cases of chronic paralysis progress must of necessity be very slow, and Schreiber very properly lays much stress on the necessity for patience and preservance. It is perhaps hardly necessary to say that by massage I mean real massage, or to point out that these good results are not likely to follow what is commonly called "medical rubbing." The late Mr. Maclean in a short communication to the *Lancet*, 1877, vol. i., p. 311, says:— "Friction is the only form of manipulation ordinarily made use of by the profession in the treatment of paralysis, and when the medical attendant orders friction, the "medical rubber" is usually called in, and without any instructions from the medical attention is left to his own devices, which in most cases consists in rubbing the skin with various degrees of force, using as a lubricating agent some oil to which some virtue is ascribed. If attention is directed to it, one immediately recognises the fact that such manipulation as this can have little effect on anything but the skin itself."

A case of chronic myelitis which was under my care serves, however, to illustrate the benefit which may sometimes be derived from a course of Massage even if very imperfectly carried out. I may say at once that I saw the patient, usually in consultation, only at long intervals, so that I am unable to trace his progress towards recovery very accurately. He was a young clergyman, a curate in the country, and it was supposed that his illness originated from getting wet through whilst riding across country one bitterly cold winter's night to see a poor woman who was at death's door and longed for the consolation of the Church. When first I saw him he was lying on his back in bed, and was completely paralysed from his waist downwards. He had no control over his legs which were drawn up towards the abdomen in a most painful position. He was racked with pain which was controlled only by large and frequent injections of morphine. The urine had to be drawn off by the catheter and was strongly ammoniacal. Constipation was a prominent symptom, enemata having to be used every time an action of the bowels was desired. There was impairment of sensation in

both hands, and the breathing was irregular and spasmodic. He had been carefully examined a few days previously by a distinguished authority on nervous diseases, who is reported to have said that no treatment would be of the slightest avail, and that in all probability the patient would not live ten days. I took a more hopeful view of the case, and after reducing the morphine, prescribed pills of physostigmine and phosphorus every three hours, with the constant current to the spine twice a day, and Massage to the legs. Considerable difficulty was experienced in finding anyone to carry out the necessary manipulations, but at last a man was sent down, who, if not a *masseur*, was at all events a very good rubber. In a few weeks difficulties arose chiefly in consequence of the expense attending the rubbing, and the treatment was partially suspended or at all events very imperfectly carried out. Some six months later I again saw the patient who was still confined to his couch, and at my earnest solicitation Massage was resorted to for six weeks. A hitch, however, occurred once more and I saw nothing of my patient for over a year when one morning he

walked into my room the picture of health and having almost perfect control over his legs. He told me that he had carried out my treatment during the whole time to the best of his ability, and that he attributed his recovery to the various remedial agents which had been suggested. He still walks with a stick and it will probably be many months before he can resume his duties, but no doubt is entertained of his ultimate recovery. He has white atrophy of one optic nerve, and the other shows signs of degeneration, but the mischief is not progressing, and there has even been some slight improvement in his sight of late. This I admit is a very incomplete account of an interesting case, but the main features are unmistakable. Had he been placed from the first under the care of an accomplished *masseur*, I cannot help thinking that the result would have been even more striking and satisfactory.

There is reason to think that massage is of much value in the treatment of LOCOMOTOR ATAXY. In Germany, however, they rarely rely on it alone for effecting a cure, but resort to active medicinal treatment as well. They are great believers in the effi-

cacy of the green iodide of mercury, which unfortunately has been struck out of the *British Pharmacopœia*, finding that it exerts a beneficial effect in arresting the progress of the disease. They give it even when there is no history of syphilis. Their "Resolvent Pills" are made by mixing one gramme of the green iodide with some inorganic substance as an excipient and dividing into 120 pills, two of which should be taken three times a day, the patient meanwhile abstaining from the use of red wine. The massage is most useful in allaying the acute pains which are so commonly an accompaniment of this complaint. Dr. Weir Mitchell, of Philadelphia, says:—"It is many years since I first saw in this city general massage used by a charlatan in a case of progressive paralysis. The temporary results he obtained were so remarkable that I began soon after to employ it in locomotor ataxy, in which it sometimes proved of signal value, as in other forms of spinal and local disease."

Massage is useful in Landy's paralysis—paralysis ascendens acuta. In these cases there is usually at first slight fever, pain in the back and limbs, and

general weakness lasting one or two days or it may be three or four weeks. This is followed by paralysis of the lower limbs, then of the body, and finally of the upper extremities with perhaps some disturbance of respiration. The electric excitability of the paralysed nerves and muscles remains perfectly normal—an important point in distinguishing it from central myelitis and poliomyelitis anterior acuta. In most cases the tendon reflex is present at the beginning of the disease but is abolished later on. The paralysis in untreated cases usually progresses upwards until it involves the medulla oblongata and death ensues.

CHAPTER VII.

MASSAGE FOR CONSTIPATION.

FOR CONSTIPATION it is certainly one of the most powerful therapeutic agents at our command. Pétrissage of the abdomen is the best method, care being taken to make the requisite manipulations in the direction of the ascending, transverse and descending colon. It should be associated with different varieties of tapotement, the flat open hand, the hand partially closed so as to form an air cushion, and the margins of the hands being employed according to circumstances. Vibratory movements are in addition resorted to in obstinate cases. Years ago Piorry advocated a mode of treatment for constipation, which is not essentially different from that now described. Averbech says: "disorders of the digestive apparatus and especially constipation constitute one of the most marked indications for the employment of massage. When there are no complications but the symptoms are due to disordered secretion, one

can always effect a cure in one or two months, or at the outside three or four." Speaking from my own experience I should say that the effects were remarkably prompt. Massage answers admirably for women who suffer from this condition, especially when there is a lax condition of the walls of the abdomen resulting from frequent pregnancies. It is of the greatest service too in constipation associated with obesity, and in that form of constipation which frequently results from taking too little exercise. It probably acts in three ways: (1) by increasing the intestinal and other secretions; (2) by stimulating the peristaltic action of the intestines; and (3) mechanically by pressing the accumulating fæces towards the rectum.

Dr. George Hünerfauth, of Bad Homburg, has published a capital little book on *Habitual Constipation and its Treatment with Electricity, Massage and Water*, in which he says:—"the usefulness of abdomen massage is especially manifest in cases of atony of the muscular coats of the bowels which is the primary and original cause of chronic constipation. This must be the more insisted on, as the much more frequent

application of massage of the joints causes many physicians to overlook the advantages of abdomen massage ; there are even a good many physicians wholly unacquainted with it."

Cases of chronic constipation are common enough, and I have recently met with several instances in which treatment by massage has done much good. Most of these depended in all probability on chronic catarrh of the intestine, but one or two were complicated by the presence of fæcal tumours which could be detected with more or less distinctness through the walls of the abdomen. In one case, the patient, a lady, had been a constant sufferer for eight years. She also complained of "uterine disorder" and "spinal irritation." The fæces were passed at irregular intervals in the form of little hard dry pellets or lumps, varying in size from a bullet to a hen's egg, their passage being attended with great pain. It would seem that certain articles of food were delayed in the intestine for some considerable time. Thus the remains of French beans, and especially of brown bread, were noticed by the patient in the motions six weeks after these articles had been

discontinued, and the same occurred with strawberry pips and other things which could be readily recognised. In this case the services of an excellent *masseuse* were obtained, and *pétrissage* and *effleurage* of the abdomen were practised in the direction of the colon for twenty minutes twice a day. At the expiration of a week the lumps were passed with much less difficulty, and the patient was able to dispense with the morning enema to which she had been long accustomed. The treatment was continued for twenty-one days, and after the interval of a month was resumed at the patient's desire for four weeks longer. She had medicinal treatment during a portion of the time, but most of the benefit derived was I think attributable to the massage. A medical man suffering from persistent constipation associated with a movable kidney, for whom I recommended massage, and who wisely placed himself in competent hands, writes at the expiration of a fortnight:—"For ten consecutive days my bowels acted promptly just after breakfast, a feat which they had not previously accomplished for five years!" In some of these cases a relapse is not uncommon, necessitating a second course of treatment.

In a communication to the Caucasian Medical Society, published in 1884, Dr. Ivan J. Kriviakin, of Botlikh, Dagestan Region, advocates the employment of massage of the abdomen as a curative agent in cases of intestinal obstruction. The procedure we are told requires only one assistant, the name of which is Patience. The operator anoints his hands with oil, separates the thumbs as much as possible from the first fingers, puts the thumbs in juxtaposition, places the hands at the lower part of the abdomen, the patient meanwhile lying on his back, and while producing steady and strong pressure, passes his hands first from downwards, upwards, then in the reverse direction, then from the right to the left and so on, repeating the manipulations for twenty minutes, by the end of which time a regular peristaltic storm is set up in the intestines. Then the patient who at the beginning of the sitting feels rather uncomfortable, but in about ten minutes experiences some relief, is allowed to rest for a hour and a half, when another sitting of fifteen minutes duration is resorted to if necessary. As a rule, however, the first sitting is quite enough, the patient

being relieved. It happens not unfrequently that in the course of the manipulations, a distinct elongated sausage-like tumour is detected, and when this is the case tapotement will be found essentially useful. Dr. Kriviakin finds this method of treatment invaluable in all cases of intestinal obstruction from whatever cause arising. He quotes the case of a strongly built man aged 24, who, in addition to constipation of ten day's standing, suffered from agonising paroxysmal abdominal pain, foetid vomiting, obstinate hiccough, offensive eructation, and distension of the abdomen. A volvulus was suspected, but after a séance of twenty minutes duration, profuse and extremely offensive defæcation followed, and the patient's bowels were subsequently moved five times in rapid succession. These observations have been confirmed by Dr. J. A. Goralevitch, Dr. M. D. Nekrasoff, and Dr. M. K. Golbeck, all of whom have related cases which have been under their care. Massage of the abdomen is frequently resorted to at the Dorpart hospital, where the patients are mainly Livonian peasantry.

Mr. Treves, speaking of Massage, says:—"With

regard to its effect in cases of faecal accumulation it must act largely as a mechanical agent, influencing the conformation of the stercoral mass and modifying its position. It would appear also to act as a direct stimulant to the intestine, for within a few minutes of the commencement of the manipulation peristaltic movements are excited which may in time reach such a grade as to cause much colicky pain. It is possible that such effect may be brought about by the immediate stimulation of Auerbach's plexus, under the control of which the peristaltic rhythm is supposed to lie. The stimulation also of the skin of the abdominal parietes may not be without influence. It is supplied by branches from the last seven of the dorsal nerves, and it is significant that it is from these very nerves that the splanchnics are in great part derived. The part played by the splanchnics in the abdominal nervous system need not be commented upon. Their precise influence upon the bowel has yet to be established, but so far as movement is concerned they appear to contain both excitor and inhibitory fibres. These explanations of the effects of massage are not entirely satisfactory, nor are they such as would

satisfy the captious doubter. The doubter, however, can wait, and in the meantime the practical man may be satisfied that he has in massage a therapeutic measure of considerable value." Dr. Cheadle has recently recorded three cases of intussusception treated by inflation and massage.

In DYSPEPSIA and other functional disorders of the digestive apparatus, massage is most useful. Applied to the abdomen it is a powerful stimulant to both the gastric and biliary secretions. Gopadze and Shpoliansky have shown that under the influence of Massage food is retained in the stomach a much shorter time than usual, and in cases of slow and difficult digestion, *pétrissage* alternating with intermittent pressure with the warm hands has been found by M. Dally to be most valuable. The case was recorded not long ago in one of the daily papers of a retired Colonial Judge, "a man of intelligence and experience, accustomed all his life to carefully discern between truth and falsehood" who was cured of dyspepsia of many years' standing by a short course of massage. The recovery was complete and he soon found himself able to eat and drink every-

thing that came along without suffering or discomfort. For flatulence it is an admirable remedy. A young lady recently told me that she became so distended after meals that she felt she ought to be married if only for the sake of appearances.

In the treatment of CORPULENCE massage is of very great value. It answers admirably for ladies, who about thirty-five, as the result of a sedentary life and other complications into which it is unnecessary to enter, find that they are beginning to get stout and lose their figures. This is a condition not uncommonly met with, and I do not know that it is ameliorated in any way by purely medical treatment. Pétrissage and effleurage of the limbs, with pétrissage and tapotement of the abdomen following the course of the colon, are the best forms. Massage in a modified form is often resorted to by ladies engaged professionally, who find they are getting too stout. It is especially useful for women who have passed much of their lives in hot climates, and have been precluded from taking much exercise. Dr. Lauder Brunton says:—"We all know how active exercise increases the appetite. Tissue-change goes on more rapidly

in the organs, waste is more abundantly excreted, and more food is eagerly sought for. But there are many feeble flabby persons who cannot take exercise, or if they can, will not. Moreover, there are others who are quite willing to exercise the voluntary muscles of the limbs, but cannot exercise the involuntary muscles of their internal organs. Now treatment by massage helps both of these. It increases the nutrition, both of the voluntary muscles and of the internal organs, and under its use patients apparently hopelessly incurable completely recover." It is a great stimulator of energy, and will "brace up" people as nothing else will. A physician who recently called on me from Sydney, told me that it was of great service for women who had been long in Australia, and who were getting stout, and I have heard similar accounts from American physicians.

Some months ago I saw a lady, aged 38, who as the result of much good living and little exercise, had become inordinately stout. She was very short of breath, and was disinclined for exertion of any kind. She had been fond of literary pursuits, but even those had lost their charm and were irksome to

her. She was extremely irritable, and a source of trouble and anxiety to her friends and relatives. Massage was prescribed, and in two months she lost a stone and a half in weight, and improved notably in other respects. Another lady whose age was reputed to be thirty-five had her waist reduced by massage from twenty-five to twenty inches and made an excellent marriage.

Dr. Benjamin Lee, of Philadelphia, in an admirable paper on "Blood and how to make it; Fat and how to reduce it," records the case of a young lady aged seventeen, who was cured of excessive obesity almost entirely by massage. She is described as being "of large frame, decidedly above the average height, and enormously fat." Her arm was larger round than the thigh of an ordinary adult woman, and the accumulation of fat upon the abdomen was immense. She could only walk with great difficulty, partly from loss of power in her legs, but chiefly from her great weight. Once a day, supported by two persons, she was helped down stairs and then wheeled out to the piazza, where she sat in fine weather to get the fresh air. This was the only exercise she was capable of

taking, and she suffered so severely from pain in her back that it was thought she had spinal curvature. A few weeks' treatment worked a marvellous change, and in three months she could walk half a mile without the slightest fatigue. The following spring she walked into town a distance of six miles in order to show her doctor how complete had been her recovery. Her figure we are told is now as remarkable for its lightness and grace as it had before been for its shapeless and unwieldly immensity.

CHAPTER VIII.

MASSAGE A REMEDY FOR RHEUMATISM.

IN RHEUMATISM and rheumatic affections, massage has long enjoyed a high reputation. It is efficacious in both the articular and muscular forms. In a curious work by William Balfour, M.D., published in Edinburgh, in 1816, and entitled "Observations, with cases illustrative of a new and simple and expeditious mode of curing Rheumatism and Sprains without in the least debilitating the System," an account is given of the treatment of rheumatism by percussion, friction, and compression. His attention was called to the subject by a little personal experience. "Having been seized with a rheumatic affection of the left shoulder, chiefly in the course of the deltoid muscle, the pain at times, but especially towards morning when warm in bed, was so severe as to make me cry out. Desirous on one of these occasions of moving my arm, a task to which its own powers were unequal, I grasped it firmly with my right hand

about the middle of the pained muscle, to my surprise and high gratification I was instantly relieved from pain, and while I thus held my arm I could do anything with it I pleased without further aid from my right hand than mere compression.” This led to an investigation of the subject, and the systematic employment in a number of cases of rheumatism, of compression, percussion, and friction; a rude and primitive form of massage in fact. By far the most startling case in Dr. Balfour’s book is that of Madame Rey De La Ruaz, a French lady, long resident and well-known in Edinburgh. She is said to have inherited gout, and to have suffered from it from the age of six. Dr. Balfour tells us that when first he saw her “all her fingers were extremely weak, some of them swelled, others so exquisitely painful that she could not suffer them to be touched, she could not lift a wine-glass with one hand, but she contrived to do it with both by turning their backs to each other. Both wrist-joints were stiff and painful, but the left could not be moved without the greatest suffering. Both elbow-joints were greatly affected, the left did not possess half the natural range of

flexion and extension. On each humerus immediately above the inner condyle a large tumour was situated, so painful that it could not be touched without making the patient cry out. All the muscles covering the humeri were from origin to insertion rigid, knotted, and thickened. The deltoid muscle felt like two boards; the connections of the clavicles with the shoulders and the joints at their flexures, the patient could not suffer to be touched. She could not lift a hand to her head Her head and a small part of the anterior portion of the trunk of her body were indeed the only parts free from disease, and she had not walked a step for eight years." The account of her case extends over nearly twenty pages, and is too long to reproduce here. It may not be very clear what was the matter with this lady, but it is interesting to note that she was completely restored to health in five months by friction, percussion, and compression, without taking any medicine, "with the exception of a few laxative pills and a saline julep when she was feverish." The author seems to have been rather proud of his success, for he says:—"I congratulate this excellent meritorious woman upon her restora-

tion to independence ; I congratulate those who are still martyrs to rheumatism ; I congratulate all mankind that a cure is at last discovered for one of the most harassing and painful diseases to which human nature is liable, a disease in its nature so obstinate as to have hitherto set at defiance the utmost efforts of the healing art."

In Sir John Sinclair's "Code of Health and Longevity," an account is given of the means by which Admiral Henry, of Rolvenden, cured himself of Rheumatism, a tendency to Gout, the Tic Douloureux, the Cramp, and other diseases, including a cataract. It appears that it was in the year 1787 that he began his medical operations, "and those only in a very slight and trifling manner, not knowing but that they might prove injurious, and his friends being extremely apprehensive that he would do himself much mischief." The instruments first employed were made of wood, but bone was subsequently substituted. The bone instruments were made from the ribs of cattle, and it was found a great advantage to have them bent, as they could thus be applied more successfully to different parts of the body. Any knobs

which existed were preserved, and others were made artificially with a file. We are told that every part of the body was daily acted upon by some of these instruments, for the purpose of preserving health and warding off the infirmities of old age. The tools were applied to the knees, ankles, and insteps, which were all much swollen and hard, owing to the rheumatism, and very painful when touched, and though the operation was very lightly done, yet he derived considerable benefit from it. After a time he began to use a common hammer, made of iron, with a bit of cork on the head, and covered with leather. He persevered in the use of this instrument for about three years, night and morning, together with small bone instruments with knobs for loosening the tendons. He completely succeeded in removing the swellings, and by keeping up the practice was restored to the use of his limbs. This was clearly an application in a primitive form of massage, or at all events of percussion.

Many rubbers employ amber oil in the treatment of rheumatism, rubbing it into the affected part with the palm of the hand. It is a volatile oil made by

distilling amber, and purified by rectification. When pure it is almost colourless. It is the *Oleum Succini* of the United States Pharmacopœia, and the *Huile Volatile de Succin* of French writers. I think it is useful for slight cases, and when massage cannot be obtained I often prescribe it. It is said to be the active ingredient in Roche's Embrocation, and in Haarlem oil, which is a mixture of balsam of sulphur, Barbadoes tar, oil of turpentine, linseed oil, and oil of amber. Rubbed into the spine night and morning it is an excellent remedy for whooping-cough.

These of course are not quoted as cases of rheumatism treated by massage. I often find massage of the greatest value in this condition after the complete failure of ordinary rubbing. A lady who has for many years suffered from chronic articular rheumatism, recently told me that she derived more benefit from three week's massage, which was carried out under my direction, than from all the drugs she had ever taken, and this is not an exceptional experience.

M. Martin, of Lyons, has recorded a number of cases of *lumbago* treated by massage, and Laisné has published other cases treated by what he calls *mas-*

sage par ondulations. The last named procedure is carried out somewhat in this way; the patient is made to lie on his face, a pillow being placed under the abdomen so that the muscles of the back are relaxed. The operator then places the tips of the fingers, slightly separated, a little below the seat of pain, and to the right of the spine; the fingers are then moved slowly upwards, pressing gently, and at the same time describing a series of small circles. When the seat of pain is passed, this is repeated in a similar way on the other side of the spinous processes. Should the pain be limited to one side, or be more severe on one side than on the other, that should have the preference, but in most cases it will be found better to make the movements first on one side and then on the other. The pressure should be gradually increased as the pain decreases. After from twenty to twenty-five minutes working in this way, similar movements should be made with the ball of the thumb and little finger, the whole ending up with the application of a moderately tight bandage. In lumbago, tender spots may often be detected on careful examination, due in all probability

to some morbid condition of the ligaments. Massage and friction over the seat of pain will usually effect a cure in these cases.

There are few conditions more amenable to treatment by massage than what is commonly called *back-ache*. This is a composite condition and may be due to a variety of causes. The patients are usually women and the suffering is undoubtedly often very acute. In the majority of cases it has its seat in the muscles, and is the result of strain or over-fatigue. The strain may be equally severe on both sides, but in patients who are in the habit of throwing the weight of the body on one leg when standing, it may be confined to one side. I have met with many examples of this in young women who have to stand for many hours a day behind the counter. Sometimes the pain is the result of pregnancy, the accumulation of dropsical fluid in the abdomen or even the development of fat. A still more common cause is uterine disturbance, this being simply one of a group of symptoms indicative of the existence of some displacement. More rarely it arises from a defect in the process of digestion and assimilation, the muscles,

as Dr. George Johnson has pointed out, being irritated rather than nourished by the imperfectly digested food. The pain is often so acute as to temporarily incapacitate the patient for exertion of any kind. Sometimes it persists all day, and for the matter of that all night, whilst in other cases it comes on at a particular hour—usually late in the afternoon—and lasts till bed-time. The suffering is undoubtedly very severe, and a lady not long ago told me she often felt as if she would like to take a knife and stick it in her back to relieve the horrible dull aching pain. I have known a sufferer from this condition stop a friendly postman or policeman in the street, and beg him with tears in her eyes to give her a good punch between the shoulders to take away the pain. In many instances I have known massage give prompt if not immediate relief. As accessory measures, I usually recommend Burgundy, cod-liver oil and hypophosphites. Menthol plasters are useful and so is the application of a cone of menthol and capsicum.

Many people suffer from vague uneasy pains in the legs, usually said to be rheumatic or neuralgic. In young people they are sometimes called “grow-

ing pains," they are intensely painful, and the patient not uncommonly suffers at the same time from a feeling of depression and wretchedness. They may be associated with disordered digestion and constipation, but this is not always the case. Very little is known about these pains, but it is found practically that they are relieved by massage. Some time ago I saw a gentleman who suffered from periodical attacks of pain in the legs; he was unable to describe the pain beyond saying that it was not an acute pain, and curiously enough he was unable to localise it; he did not think it was in the joints and yet he could not say where it was. There was no tenderness, but the legs seemed to him to be heavy, and to be perpetually aching; sometimes it would attack the arms, and was then most marked in the shoulders and wrists; it rarely troubled him at night, and never incapacitated him in any way; he had never had rheumatic fever or any acute illness, and lived a fairly regular life, eating well, working hard, and taking a fair amount of exercise; there was no hereditary tendency to gout as far as he knew, and he usually drank hock or claret, and took but little

beer ; he was in fairly comfortable circumstances ; but had had a hard struggle to get on in the world ; the attacks of pain usually lasted some three or four hours, sometimes all day, and were accompanied by a good deal of mental depression ; they were intensified and commonly excited by worry or anxiety of any kind. I was unable to give any definite opinion as to their origin and nature, but suggested massage as a mode of treatment, and this afforded prompt relief.

CHAPTER IX.

MASSAGE AND NEURASTHENIA.

DR. DOUGLAS GRAHAM, of Boston, speaks highly of massage in the treatment of NEURASTHENIA. He uses it for those "who, in spite of rest, change and medication, have become chronic neurasthenics, the result of business reverses, overwork, worry, loss of relatives, disappointed hopes, or as a sequel of some affection that has existed in some part of the system, but which has recovered or has become of secondary importance." These symptoms may be somewhat ill-defined; but I have certainly found massage of the greatest use in what, for want of a better name, has been called "SPINAL NERVOUS WEAKNESS," or "NEURASTHENIA SPINALIS." Erb speaking of this condition says:—"Abundant experience has shown me that these cases are not rare, and that they are of great practical importance; they give rise to much anxiety, not only to the patient but to the physician, owing to the striking resemblance they often exhibit to severe disease of the cord." These cases of spinal

weakness are usually met with amongst the rich and educated. Some months ago I saw a young man who had had a distinguished college career and was working hard for a profession. He was a great big strong fellow capable of any amount of physical exertion, but instead of devoting himself to athletics, he preferred reading medical works and analysing his feelings and sensations. He complained of "restlessness at night," of "inability to apply his mind," of "coldness in the hands and feet," of "burning pain in the spine and across the back," of "dimness of sight," of "numbness of the hands and fingers," and "disturbed dreams." His appetite was good, he was well nourished, and I failed to detect any organic disease. He had taken a good deal of medicine, and had tried rest and change of air, without much benefit. I recommended effleurage and pétrissage of the back and legs, with the application of a constant current to the lower dorsal vertébrae by means of a large sponge electrode, and in six weeks almost all the symptoms had disappeared. Another patient complained of feeling "dull and gloomy in company," of "bad memory," "loss of

energy," of "tremblings in the back of the neck and down the spine," of being "very nervous," and of a sensation as if he were "sinking through the bed at night." Neurasthenia, or at all events a closely allied condition, is common amongst Americans who have been engaged in large business transactions. I recently had under my care a gentlemen who offered an excellent example of this condition. He was certainly one of the "brightest" and most original thinkers it has ever been my pleasure to meet, a brilliant conversationalist, a genial companion and a smart writer. He had built up a gigantic enterprise, and his operations were conducted on an enormous scale. He told me that he wrote or dictated as many as 90,000 letters a year. He had travelled all over the world and had made an enormous success. But everything had been on his shoulders, and after twelve years of hard work, both night and day, he felt that he could do no more and that he was temporarily "played out." He tried rest, but to a man of his temperament rest was an impossibility, and he had little or no faith in medicines. He had been through all kinds of "cures"

but without much benefit. He had such a superabundance of energy that he always got through a three weeks' course in about two days and a half. I tried electricity at his own request, sometimes the constant and sometimes the interrupted current, and it certainly did him more good than anything. I cannot say that I treated him, but I carried out certain treatment at his suggestion and I was glad to be of use to him. I never had a pleasanter patient, or one I liked better. His sufferings were very real and I heartily sympathised with him and was delighted when he got better.

The Weir Mitchell system is now largely used in the treatment of many of these cases. It is not Massage in the sense in which we employ the term, but a combination of isolation, rest, over-feeding, electricity and rubbing. I know of very many cases in which it has undoubtedly answered admirably, the patient benefitting greatly by the treatment. In other cases, however, it has been a dismal failure and much harm has resulted both to body and mind. Seclusion is a serious matter and the expense has also to be taken into consideration. I hear of ninety

pounds and even more being charged for a few weeks' treatment by this method. It may be a perfectly legitimate charge, but I confess I do not understand it, and I certainly should be sorry to pay it. Dr. Benjamin Lee, one of the best authorities on Massage in America, evidently regards "overfeeding" as anything but an unalloyed blessing, for he says:—"The Italian ortolan, seduced by supposititious sunrises into taking five meals a day, is not as happy or lively a bird as his American cousin the bobolink, which feeds but twice. A Strasbourg goose is certainly not the synonym of health and vigour; and however tempting a *paté de foie gras* may be to the palate of the epicure, the livers which compose it were anything but a source of comfort to their original owners. Life which depended on such livers was certainly not worth living." Zabludovski commenting on this special method of treatment, says that it is a mistake to place patients suffering from neurasthenia in a hospital or "home" where a number of invalids are congregated together, for they never do well, and it is much better that the patient should be surrounded by those who are well

and strong, rather than by those who are weak and emotional. He thinks, too, that by subjecting the patient to several hours’ “Massage” daily, harm is often done instead of good. The exposure is no light matter, and cold and chilliness frequently result. Massage may be compared to sea-bathing in its effects. A dip acts as a tonic, bracing up the system, whilst a long immersion is depressing and lowers the vital powers. The patient should be mistress of her own servants, and it should not be left to them to order her about and make her do as they think fit. We should encourage her to exercise her authority and not endeavour to destroy her self-esteem.

Dr. Weir Mitchell’s “Fat and Blood,” an Essay on the Treatment of certain forms of Neurasthenia and Hysteria, may be regarded as the classical work on the subject, and is so familiar to readers on both sides of the Atlantic, that it is hardly necessary to do more than mention it. The fourth edition should be in the hands of every one interested in the treatment of these marvellous, interesting cases. In an able article on “Rest in Nervous Disease,” published in

Seguin's American Clinical Lectures in 1875, Weir Mitchell points out that it is easy for a physician to say to a woman who has been in bed for a month and is able enough to get up: "Now the time has come for you to leave your bed," but he may find perhaps that she has gained a set belief that she cannot get up, and that to give her back the assurance of her ableness to walk is no light or easy matter. There are other grave objections to the isolation treatment. In the first place it brands the patient with the name of hysteria. Then again people are not very particular to distinguish accurately between "isolation" and "seclusion," and to say of a young lady that she was for a time in seclusion is not to improve her matrimonial prospects. It seems, too, an unwise thing to trust an uneducated nurse with a galvanic battery and let her use it on a patient without knowing or perhaps caring what pain she may give or what harm she may do. The expense, as I have said, is a serious consideration, and if uneducated labour is employed, as is undoubtedly often the case, I cannot see why such heavy fees should be charged. It is a perfectly

legitimate mode of treatment, I have no doubt, but it is very apt in unscrupulous hands to degenerate into charlatanism and quackery.

CHAPTER X.

SPINAL IRRITATION AND MASSAGE.

MASSAGE is of the greatest use in the various forms of that peculiar and interesting condition described many years ago by the late Mr. Thomas Pridgin Teale, of Leeds, and the brothers Dr. and Mr. Griffin, of Limerick, and now commonly known as SPINAL IRRITATION. Mr. Pridgin Teale in his classical work says:—"The symptoms of this affection consist in an infinite variety of morbid functions of the nerves of sensation and volition, which have their origin in the spinal marrow, and the parts in which these morbid functions are exhibited of course bear reference to the distribution of the spinal nerves. The morbid states of sensation include every variety, from the slightest deviation from healthy sensibility of any part, to the most painful neuralgic affections on the one hand, and to complete numbness or loss of feeling on the other, including pains which may be fixed or fugitive, or darting in the direction of the nerves, pricking and tingling sensations, a sense of creeping

in the skin, of cold water trickling over it, and numerous other states of perverted sensation, of which words are inadequate to convey a description. In the muscular system we find weakness or loss of power, and sometimes a tendency to rigidity. These symptoms sometimes exist in so light a degree that the patient considers them unworthy of notice, and only admits their existence when particular inquiry is made respecting them; the only complaint which he makes being an unaccountable sense of weakness and inability of exertion. In other cases the tremors have excited alarm; sometimes the neuralgic pain in the scalp, or the fixed pain in the muscles, particularly when it occurs in the intercostal muscles, have suggested the idea of serious disease in the brain or in the lungs, and when the pain is seated in the muscles of the abdomen, a fear that some organic disease of the abdominal organ has taken place harasses the mind of the patient."

In these cases tenderness over the spine corresponding to the origin of the affected nerves is always a prominent symptom. Sometimes, however, it is not complained of until specially inquired for, and

now and then its existence is not even suspected by the patient, until she is made to wince when pressure is exerted by the hand of the physician. Nervous pains and neuralgias of different kinds shifting suddenly from place to place, are amongst the common symptoms of this peculiar affection. They are brought on by the slightest exertion, by lifting a weight, by twisting or straining the back, or by any effort mental or physical, and usually they are relieved to some extent at all events by lying down. Teale says:— “Irritation of the lower cervical portions of the spinal marrow gives rise to a morbid state of the nerves of the upper extremities, shoulders and integuments at the upper part of the thorax. Pains are felt in various parts of the arm, shoulder, and breast, sometimes the pain takes the course of the anterior thoracic branches of the brachial plexus, occasionally the pain is fixed at some point near the clavicle, scapula or shoulder joint, at the insertion of the deltoid or near the elbow, or shoots along the course of some of the cutaneous nerves. Frequently one or both of the mammae become exquisitely sensitive and painful on pressure, and some degree of swelling occasionally

takes place in the breast, attended with a knotty and irregular feeling when the neuralgic pains have existed a considerable time in the part." Nausea, retching, and vomiting, are not unusual concomitants, and the same may be said of spasmodic cough and difficulty of breathing. Palpitation is often met with, frequently associated with a feeling of pulsation at the pit of the stomach, throbings in the temples, heats and flushes, and a tendency to faint. Ross says, the symptoms begin with headache, sleeplessness, increased nervous irritability, ill-defined pains in the face or extremities and general feebleness. "The patient now complains of pain in the back, which is aggravated by exertion, and is situated most frequently between the shoulder-blades, or in the back of the neck and less frequently in the loins. The spinous processes of some of the vertebræ are excessively tender to pressure, and over these processes the surface is found to be very sensitive when a hot sponge or the cathode of a galvanic current is applied. Tenderness of the vertebræ to pressure is indeed the most constant and important symptom of spinal irritation, and this sign is rendered all the

more valuable from the fact that spinal tenderness is never a prominent symptom of myelitis and other organic diseases of the cord. The patient complains of various paræsthesia and neuralgiform pains in the upper or lower extremities, occiput, face, pelvic region, bladder, genitals or viscera; the slightest exertion occasions great fatigue and exhaustion, and walking soon becomes impossible, owing to the excessive pain caused by it. The motor symptoms consist of fibrillary twitchings, spasms of some muscles, choreic movements, hiccough, and even permanent contractures in some cases." Prolonged and spasmodic muscular contraction, as in the case described by Dr. Radcliffe in Reynolds' "System of Medicine," is sometimes the most prominent symptom. In a case described by Dr. and Mr. Griffin, sudden insensibility was always induced by even slight pressure on the seventh or eighth dorsal vertebra. In another case a sense of faintness was engendered in the same way:—"On examining the spinal cord, although there did not appear to be any tenderness, the sensation of pain was excessively disagreeable to him through its whole course. When the finger

rested on one of the dorsal vertebræ he grew pale and terrified, and would have fainted had the pressure been continued. He felt no pain, but a sudden indescribable sensation or thrill through every nerve in his frame, which was inconceivably horrid, he shuddered at the idea of permitting a repetition of the pressure, and had an unpleasant feeling about the part for the remainder of the day. When a few weeks had elapsed, however, he allowed another examination with precisely the same results." I know of no class of cases in which general massage does so much good as in spinal irritation. Very often the patients have long been in the habit of taking morphia, but this mode of treatment will enable the physician to discontinue its use, or at all events materially diminish the dose. I recently had under my care a lady who was to the best of my belief suffering from this condition. She was probably about forty-two years of age, but might well have passed for thirty-four or at the outside thirty-six. She was not in the least degree hysterical, and was one of the best read and most accomplished women I have ever met. She was a good linguist, a painter in oils, a musician, and could

beat most men in riding, driving, swimming or even billiards. She worked hard and when people were in trouble they consulted her in preference to the clergyman of the parish or even the doctor, knowing that they would command her sympathy and active cooperation, and receive good sound practical advice into the bargain. It is needless to remark that possessing all these good qualities she was married. She had been ill for some time, but how long she could not say, for she made light of her own ailments, and refused even to discuss her symptoms until she was temporarily incapacitated for active work. She suffered severely from pain in the back between the shoulder-blades, brought on by the slightest exertion or even by mental worry or anxiety. It was a hot burning pain, and on examination there was found to be marked tenderness over the spinal processes extending from the first to the sixth dorsal vertebræ, and increased by the application of a hot sponge. The weight of her clothes was a source of discomfort, so that even in winter she went about lightly clad. I suggested a course of Massage and she came to London and took rooms in order to be near me. She

was never isolated, but during the first month went out little and had few visitors. She improved under the treatment but not so rapidly as I had anticipated, and accordingly during the second month we changed our tactics. She no longer remained in the house but went out every day, in the morning to visit her *masseuse*, and in the afternoon to pay visits and transact business. The change was beneficial and she was practically cured, and was well enough to return home and resume her life of hard work. The pain in the back had not completely ceased, but it came on only at long intervals and after an unusually heavy day. I think my diagnosis was right but at all events the result of the treatment was satisfactory. The brothers Griffin although in all probability they knew nothing of massage, as we understand the term, clearly recognised the value of friction to the spine; they say:—"Friction of the spine along its whole length for a considerable time daily, has been employed by most practitioners who have directed their attention to the complaint. It will sometimes be found a good substitute where blistering disagrees, and occasionally gives more relief than any other

remedy. It seems particularly useful in abating the morbid sensibility of the vertebral column, which is so striking on pressing certain portions of it."

I have had a good many cases of spinal irritation under my care during the last twelve months, and some of them, especially those of long duration, have proved very obstinate. When slow progress is made under Massage, I usually apply menthol and capsicum freely to the spine in the form of a cone. Another equally efficacious preparation is strong capsicum linament. In a recent case which had resisted all ordinary treatment a plentiful application of capsicum to the back, followed immediately by the hypodermic injection of seven minims of a one in twenty solution of nitrate of pilocarpine worked wonders. The perspiration greatly intensified the local action of the capsicum without producing any discoloration or destroying the cuticle. Some of these cases as I have said are extremely difficult to cure. Only a few months ago a lady was sent up to me from Derbyshire for treatment. I do not know exactly how old she was but she was about thirty-one or thirty-two. She suffered from persistent neuralgia from

the age of twenty to twenty-three, and since then had been practically a confirmed invalid. She was not actually confined to bed, but she passed the greater part of the day in her bed-room, and was only comfortable when lying on her back. Her symptoms were very indefinite but she complained chiefly of a burning pain in the spine, extending from the first to the fifth dorsal vertebræ. I could detect no organic disease and yet she seemed incapable of any exertion. Her appetite was good, she was not anæmic, her bowels and menstrual functions were regular and she was apparently anxious to get well. She was not unintellectual but she had spent the greater part of her life in a small country town and was listless and apathetic and extremely difficult to rouse. I tried first massage and electricity for six weeks, then painted her back with capsicum, and gave her hypodermic injections of pilocarpine from time to time, but without I am bound to say very much benefit. She was an utter disbeliever in medicine, and had tried almost everything except matrimony. Whether that would have cured her I am not prepared to say.

CHAPTER XI.

MASSAGE IN ORGANIC DISEASES.

THERE are undoubtedly many cases of organic disease in which massage proves directly useful. A short time ago I mentioned in the *British Medical Journal* that I had treated with success a gentleman, aged 68, who came to me complaining of shortness of breath, and increasing disinclination to take exercise. He had been in business, and had led a most active and energetic life. Three or four years ago he retired, and from that time experienced a gradual falling off in health. His appetite was poor, his bowels were obstinately confined, and he was nervous and anxious about himself. He was found to have a loud apex systolic murmur, and the heart's action was weak and irregular. I suggested massage, which was carried out systematically four days a week, for a period of six weeks. He improved from the very first, and before the conclusion of the course, was better than he had been for many months.

His appetite returned; his hands and feet were warmer; the bowels became regular; he slept well at night; and his spirits improved in a most satisfactory manner. A still more striking case has recently been under my care. A young lady, aged 22, was brought to me suffering from palpitation, shortness of breath on the slightest exertion, and extreme œdema of the legs. She was unable to take exercise, and the legs were so swollen that they pitted deeply on pressure. On examination of the chest, she was found to have a loud apex systolic murmur. She had never suffered from rheumatic fever, and her parents had not the slightest idea that her heart was affected. I gave her first digitalis and then strophanthus but without much benefit. Systematic massage was then resorted to and almost immediately a diuretic action was induced, and the patient was relieved of her most urgent symptoms. In three weeks her legs had returned to their normal condition, and she was able to walk farther and better than she had done for two years previously. In all cases of œdema of the legs where the tissues are so puffed up that they pit on pressure, either as the result of cardiac disease or

chronic kidney affection, massage is of great value in promoting absorption and improving the circulation.

Dr. Carl J. Rossander, the Professor of Surgery at Stockholm, states that nearly a third of the people who come there for treatment by Massage are suffering from some form of heart disease. The results he adds are very good and there is every reason to be satisfied with the benefit experienced. He has seen every symptom of fatty degeneration entirely removed and valvular diseases so much alleviated that the patients' have ceased to suffer even when the anatomical signs have remained unaltered.

Massage is most useful as a nervous sedative. Graham says, that "upon the nervous system as a whole, massage most generally exerts a peculiarly delightful and at the same time profoundly sedative and tonic effect. While it is being done, and often for hours afterwards, the subjects are in a blissful state of repose, they feel as if they were enjoying a long rest, or as if they had just returned from a refreshing vacation; quite frequently it makes optimists of them for the time being. An aptitude for work usually follows, though generally those who submit

to this treatment feel gloriously indifferent, and needless apprehensions are dispelled." In *INSOMNIA* general massage at bed-time undoubtedly promotes sleep. Several cases have come under my observation in which it has been resorted to with marked success. The result is not only certain but prompt, the patient usually enjoying a good night's rest after the first séance. It has the great advantage over all narcotics that there are no disagreeable after effects.

I know several stockbrokers who resort systematically to *Massage*. They say it "calms the nervous system" and allays the excessive irritability and sense of tension from which they so frequently suffer. There are other people who without being either Brokers or Jobbers are always worrying about "Berthas," or "Saras," or "Doras" and they too are benefitted by the same treatment. At the same time it must be admitted that *Massage* does not suit everybody and it certainly should not be resorted to without adequate advice.

Ordinary medical rubbing often does a great deal of harm in these cases. Dr. Walter Johnson of Great Malvern in his work on the "*Anatriptic Art*,"

says, "rubbing has a very peculiar effect upon the nervous system. I have produced sleep by delicate soothing strokings of the upper part of the back in a sleepless patient, and everyone who is rubbed appropriately has a tendency to sleep. But there is a way of rubbing which irritates and excites the nerves, and an unskilled rubber, rubbing in this manner will do frightful mischief. A lady suffering from spinal weakness came to Malvern for change of air. Here she was introduced to a female rubber who professed to be able to do great things for her spine. The lady wrote to her medical attendant who resided in a distant town and received his permission to be rubbed. So the rubbing took place and was persevered in, in spite of a continued increase of unfavourable symptoms, until at last the lady grew so ill that I was sent for. I found her suffering from acute congestion of the brain, produced entirely by the injudicious rubbing."

There are many general or constitutional diseases in which massage is useful. It would at first sight perhaps hardly be supposed that massage would do much good in ANÆMIA, and yet in obstinate cases it is

a most valuable accessory. Persistent anæmia is often met with in women who take little exercise and remain indoors the greater part of the winter. Iron up to a certain point does good, but after a time it is not assimilated, and fails to do any good, and the patient no longer improves. A short course of massage then proves most useful, and on resuming the iron there is immediate improvement.

I have found massage of much value in certain stages of **SYPHILIS**, especially in women. The patient has perhaps been well treated, and has taken mercury in small doses at intervals for a year or more, and all the active symptoms have subsided. A general condition of debility, however, still persists, which is intensified rather than relieved by medicinal treatment. Massage may then be resorted to with great benefit, the patient rapidly improving in general health. General Massage was of essential service in the case of a lady whose left breast had been removed for **CANCER**. There had been a recurrence of the disease and the axillary glands were extensively involved. She suffered much pain with a sensation of "contraction" in the corresponding arm. Mas-

sage of the legs and body always afforded temporary relief, the patient remaining for some time in what she described as a "mesmeric" condition, in which pain was completely abolished.

Some months ago I saw a lady who passed with each motion and with considerable pain and difficulty, large lumps of undigested fat. I was in some doubt as to the exact nature of the complaint, but regarded it as an affection of the pancreas. Massage of the abdomen did good, but the patient was more speedily relieved by hypodermic injections of pilocarpine.

It would hardly seem likely that Massage would prove of much value in any of the acute specific diseases, but Professor Maclean, of Netley, speaks highly of its utility in the treatment of intermittent fever. He says that if steadily and skilfully performed by an expert, it diminishes congestion of the abdominal organs, distributes the blood more equally throughout the system—a powerful aid to its depuration—regulates the action of the bowels without the necessity for resorting to aperients, removes the oppressive feeling of languor and lassitude, and

promotes cheerfulness and a healthy action of the skin.

In the CONVALESCENCE from many diseases, acute and chronic, massage is most useful. It improves the general nutrition, and the patient often gains strength very rapidly indeed.

My friend Dr. Dujardin-Beaumetz of Paris, speaks well of Massage in NEURALGIA, and I can to some extent confirm his experience. In these cases I usually depart from the ordinary methods of procedure, and content myself with pressing firmly with the thumb or finger on the tender points, keeping up a gentle vibratory movement at the same time so as to deaden the pain of the pressure. In neuralgia of the limbs the same mode of treatment may be resorted to with advantage.

Some two years ago, Dr. G. Norström, of Paris, published an admirable work on the treatment of Megrism by Massage. He finds as the result of numerous observations, that this affection is not uncommonly associated with inflammatory deposits in the muscles of the neck and head. He gives a table showing the relative frequency with which they occur

in different situations, from which it appears that they are most commonly met with in the posterior cervical region. In addition there is sometimes a thickening of the nerve sheath, and there may be induration of the subcutaneous cellular tissue. These deposits are not easy to detect, but they may be recognised by the practised observer, and will be found to be much more tender than the surrounding parts. They are common in the tissues of the forehead and temples, and the pain often radiates from them to the vertex. Not uncommonly too the skin itself is indurated and extremely sensitive. Vretlind has satisfied himself of the existence of these deposits, and thinks that no physician should attempt to treat a case of neuralgia or megrim without searching for them. They can be removed by massage, and the symptoms then entirely disappear. Norström gives a detailed account of thirty-six cases, some of them of many years duration, in which this mode of treatment was successfully pursued. The deposits are sometimes difficult to disperse, and the sufferer has to exercise a good deal of patience.

In congestive headache effleurage should be per-

formed gently over both the external and internal jugular veins, so as to facilitate the passage of venous blood. The effect is almost immediate, relief being obtained in a few minutes.

In an article by Dr. George W. Jacoby, of New York, which recently appeared in the *Journal of Nervous and Mental Diseases*, a good account is given of massage of the neck. The method advocated was originally introduced by Gerst, of Wurzburg, who found that by practising effleurage over the jugular veins he could abstract blood from the brain and meninges. He noticed that patients, who before the séance complained of a feeling of pressure and congestion in the head with flushed face and dilated pupils, were at once relieved by this simple procedure.

Professor Max Schüller, of Berlin, has recorded fifteen cases of sciatica successfully treated by massage, and is convinced of its superiority over all remedial agents commonly employed. The pain quickly abates, and the power of walking improves daily. The duration of treatment is, on an average, two weeks and a half, but in one case a cure was

effected in nine days, and several others in from ten to fourteen days. One patient abandoned the treatment after five days in favour of electricity and vapour baths but deriving no benefit, returned to the massage and was cured in nineteen days.

CHAPTER XII.

MASSAGE IN SURGICAL AFFECTIONS.

THERE seems to be a general consensus of opinion that massage is well adapted for the treatment of certain chronic joint affections, and most of those I saw treated by Von Mosengeil were such as would in this country be considered incurable, or would drift into the hands of "bone-setters." Reibmayr has demonstrated its value in chronic synovitis, whilst Norström's article on *Massages dans les Maladies des Articulations et leur annexes*" is well known. Friction with effleurage is the method employed. Massage is of the greatest possible value in the treatment of sprains, both acute and chronic. The old-fashioned plan was rest in bed and evaporating lotions, the modern treatment is massage and nothing else. As a rule massage is not well adapted for cases in which there is acute inflammation, but an exception has to be made for sprains, a host of observers having recorded their opinion in favour of the innovation.

The pain, the discolouration and the swelling disappear as if by magic. It is important to begin the treatment at once, there being nothing to be gained by delay. Norström records the case of a lady aged 46 who slipped and sprained her ankle. The pain was very acute and she was unable to walk. She was nervous and excited and cried out when the part was touched. There was some swelling in front of the malleoli but fortunately no bones were broken. Very gentle effleurage was resorted to for a quarter of an hour, and it was then found that the joint was much less painful, and could be moved more readily. The treatment was repeated, and the same evening she was able to proceed to Saint Germain where she lived. On a previous occasion she met with a similar accident and was confined to her bed for six weeks.

Dr. Douglas Graham records the results of the massage treatment in 308 cases of sprains, contusions of joints and distortions, the average time needed for recovery being nine days. The average of 55 cases treated by rest and compresses was 26 days. The Massage average would have been better

had it not been for 39 cases which were not seen until from ten days to three weeks after the accident. These cases took on an average 21 days to get well. Dr. Graham points out that the sooner the treatment is commenced the shorter is its duration. The advantages resulting from Massage are speedy relief of the pain and swelling, and earlier and more perfect use of the joint and limb. Bergham has treated successfully by Massage no less than 145 cases of recent traumatic joint affections, including contusions, distortions, and synovitis with effusion. Seventy cases affecting the ankle joint recovered on an average in six days, whilst 38 cases of old sprains required 22 days each. It was found that after a plaster of Paris dressing had been applied even for a very short time, the duration of the treatment was much prolonged. Nélaton, Séé, Demarquay, Labbé, Duplay, and others speak highly of the value of Massage in affections of the ankle joint. Dr. Roux, of Lausanne, says that it acts almost like magic in cases of synovitis, whether of rheumatic origin or resulting from an injury. For stiff joints of various kinds nothing could be better. Many surgeons are now employing

this mode of treatment in this country, and will presumably in due course publish their experiences.

There is a curious work which gives some very interesting information on the use of various forms of friction in the treatment of sprains and joint affections generally. It is entitled “A Full Account of the System of Friction as adopted and pursued with the greatest success in cases of Contracted Joints and Lameness from various causes, by the late eminent surgeon, John Grosvenor, Esq., of Oxford, with observations on those cases to which it is most applicable, by William Cleobury, Member of the Royal College of Surgeons of London, and one of the surgeons to the Radcliffe Infirmary, Oxford.” Although published as recently as 1825, it is a comparatively rare work, there not being a copy in any of the medical libraries in London. The third edition contains a reprint of the life of Mr. Grosvenor, and is illustrated with his portrait. His method of manipulation is described at considerable length, but is hardly worth reproducing, as it is simply an imperfect form of Massage. His results, however, appear to have been wonderfully good, and people came from all parts of the

world to be under his treatment. He selected his cases carefully, and declined to undertake those which in his opinion would not yield speedily to treatment. He recommended friction for "contractions of the joints, unattended with inflammatory symptoms proceeding from colds, damp beds, or rheumatism." He thinks too that it is useful "where there is too great a secretion of the synovial fluid of the joints, particularly in the knee-joints." Good results have in his hands followed this treatment "in incipient cases of white swelling." He by no means confines himself to surgical cases, but devotes much attention to children "who are weakly or rickety, or in whom the circulation is languid." It is recorded of Mr. Grosvenor that he always insisted that his patients should "work with him." "Your own constant exertions are necessary as well as mine" he would say. He occupied a good deal of his leisure time in walking with his lame patients, in order that he might judge for himself what progress they were making. The book is interesting and well worth reading.

If some months ago I had been asked if Massage

would likely to do good in cases of fracture, I should have answered unhesitatingly in the negative. Now, however, I can answer equally positively in the affirmative, and I must acknowledge my indebtedness to Mr. Arvid Kellgren, a graduate in medicine of the University of Edinburgh, for setting me right on this point. Mr. Kellgren has been kind enough to take me to see a lady who five weeks ago fractured her fibula in the lower third whilst stepping from her carriage. Mr. Kellgren was fortunately close at hand and treatment by Massage was commenced at once. I am assured that no splint of any kind was employed, and that the lady was never confined to her bed. The manipulation was carried out for about half-an-hour twice a day for the first week, and then only once a day for the remainder of the course. The lady is now perfectly well, and can walk up and down stairs as easily as ever and without assistance of any kind. It was a simple fracture, and the site of union can be distinctly felt. The lady is I should think about forty years of age, and she is not a very favourable subject for treatment as she suffers from gout in both feet. Mr. Kellgren's

manipulations, which I witnessed, consisted chiefly of what we call *pétrissage*, commencing, however, from above the fracture and working downwards with, in addition, slow and deliberate *effleurage*. I had also an opportunity of witnessing the results of a case of fracture of the humerus near the elbow joint and one of fracture of the tibia, the result of a fall, both of which had been treated in a similar manner and with equal success. I find on reference to the literature of the subject—which I had previously overlooked—that this method of treatment is advocated by several continental writers. Dr. Lucas Champomnière, of Paris, points out that in the case of fractures near and into joints, immobilisation is attended with considerable danger, whereas massage skilfully applied acts well from the first, relieving pain, favouring repair, preventing stiffness, and reducing the duration of the treatment. He mentions the case of a doctor who in alighting from a tramcar twisted his foot, and experienced such great pain that he had to be taken home in a cab. On examination it was found that there was a fracture of the fibula *par arrachement*. Immobility and daily massage avoiding the seat of

fracture were ordered. The pain and swelling diminished gradually, and twelve days after the accident he was able to put on a boot and walk. Another remarkable case was that of a high government official who fell from his horse and fractured the radius. Massage was resorted to and we are told that in forty-eight hours all pain had disappeared. At the expiration of four days he could write fairly well, and in a fortnight he had recovered every movement of the arm. Although it was a serious accident he had to employ a substitute only two days.

CHAPTER XIII.

MASSAGE IN POISONING.

MASSAGE is undoubtedly of much value in the treatment of many cases of poisoning, both acute and chronic. I would especially recommend it in acute chloral poisoning as a means of maintaining the temperature of the body. It is, I am sure, unnecessary to remind my readers that we technically recognise two forms of chloral poisoning, the chronic and the acute. When chloral is taken habitually as a sedative as many ladies take it night after night during the season, and it produces injurious effects, we speak of it as chronic chloral poisoning, or "chloral tippling." When, however, a large dose is taken with suicidal intent, and the patient is in danger of losing his life, we call it an acute case. A not over-wise critic recently objected, that in these so-called acute cases there would be no time to obtain the services of a *Masseur*, in evident ignorance of the fact that even after a large dose has been

taken, life may be prolonged for many hours and even one or two days. I remember a case in point. A young and beautiful woman, recently married, took a large dose of chloral one night about ten o'clock, because her husband had some papers to read and would not come to bed. I saw her at twelve, and she was then profoundly insensible, and as seriously ill as any respectable young married woman could wish to be. She was deadly cold, and I had to drag her round the room in her night-gown, followed by the cook and the house-maid, for the greater part of the night. She recovered, but it was not till daylight that she was out of danger. This occurred in London, and not the slightest difficulty would have been experienced in obtaining skilled assistance in performing Massage had it been considered advisable to resort to it. In out of the way country districts it would not be so easy, but it must be remembered that it is only in large towns that husbands decline to go to bed and sit up late at night to read legal documents. In one of the most determined cases of suicide I ever witnessed, the poor fellow had taken three hundred

grains of chloral and a hypodermic injection of thirty grains of morphine, life was prolonged for four hours and there was no difficulty in obtaining any amount of Massage. I can only repeat that I consider the Massage treatment an important factor in what to do in these cases, and that I would certainly advise its employment when opportunity occurs.

In the treatment of chronic lead poisoning Massage is useful, not only for the colic but in conjunction with electricity, for the paralysed muscles.

In a case recently under my care it was of essential service, the patient regaining power over his wrist much more quickly than he would have done with electricity alone.

In chronic morphine poisoning where the patient is accustomed to use hypodermic injections frequently, I know of nothing which so effectually allays the craving for the drug and enables the patient to dispense with its use as Massage. As Bartholow says: "The introduction of the hypodermatic syringe has placed in the hands of man a means of intoxication more seductive than any which has hitherto contributed to his craving for narcotic stimulation.

So common now are the instances of its habitual use and so enslaving is the habit when indulged in by this mode, that a lover of his kind must regard the future of society with no little apprehension. For every remote village has its slave, and not unfrequently several, to the hypodermatic syringe, and in the larger cities, men in business, and in the professions, women condemned to a life of constant invalidism, and ladies immersed in the gaieties of social life, are alike bound to a habit which they loathe, but whose bonds they are powerless to break." Massage answers well both in Morphinism, where the drug is taken to allay pain, and in Morphinomania, where it is resorted to as a tonic, and for the sake of the pleasurable sensations it induces. The use of the drug should not be stopped suddenly, but the dose should be gradually reduced. The morphine during this process should not be given alone, but in combination with atropine. When the craving for the injection is great, nitro-glycerine should be administered, or, acting on the suggestion of Dr. Oscar Jennings, sulphate of sparteine, a salt of one of the active principles obtained from the

common broom, may be injected. Tonics such as quinine or *nux vomica* with capsicum and hydrochloric acid are useful as accessories, and for the restlessness at night there is nothing better than bromide of sodium in half drachm doses at bed-time. Dry iced champagne is useful and so is coca wine. The patient must come and live near his doctor, but he need not be isolated, at all events in the sense in which the word is now so commonly employed. He must be occupied and amused, and in these cases I regard theatre-going as a powerful therapeutic agent. The beneficial effect of music judiciously employed is now generally recognised. The patient must be fed up, and a good cook is half the battle. Massage should be resorted to twice or thrice a day, and the sittings should be of short duration. Electricity is a useful adjunct. The course of treatment lasts six weeks, and if the patient will do as he is told and follow these directions implicitly, a cure may be safely promised. In connection with this subject I would advise a careful study of two admirable papers which have just appeared. The first by Professor Benjamin Ball and Dr. Oscar Jennings,

of Paris, is entitled “*Considérations sur le Traitement de la Morphinomanie*,” whilst the other by Dr. Jennings alone, is “*Sur un Nouveau Mode de Traitement de la Morphinomanie*.”

Massage has been recommended in chronic alcoholism, but I fear nothing but total abstinence does much good for these unfortunate people. If they cannot adopt this measure they should consult an undertaker and not a doctor.

I used Massage with great success in the case of a lady who had a most inordinate craving for tobacco. She had lived much abroad and smoked incessantly from the first thing in the morning to the last thing at night, lighting one cigarette from another, and only knocking off for about an hour during dinner. Her usual allowance of strong Turkish Cigarettes was a thousand a month, and even this was sometimes exceeded. Massage twice a day soothed her, and notably diminished the consumption of tobacco.

CHAPTER XIV.

MASSAGE IN UTERINE COMPLAINTS.

FOR many forms of menstrual disturbance massage may be safely prescribed. I recently saw a young lady, aged 19, who suffered intensely at each monthly period, the pain being so severe, that hypodermic injections of morphine had to be resorted to. Massage of the abdomen and pelvis was prescribed, and from that time there was no return of the trouble. Cazeaux has reported several similar cases in detail. Douglas Graham recommends general massage in amenorrhœa and dysmenorrhœa when neither local treatment nor operative procedure is indicated. He finds it especially useful in atony of the nervous and vascular systems, and when no abnormal state of the blood exists, but rather a condition of torpor of the pelvic organs. In these conditions massage may be employed with advantage, both during the catamenial periods and in the intervals. Dr. Graham and Dr. Henry B. Stoddard have published a number of cases

of uterine disease treated by this method, and Dr. Asp has also obtained good results in chronic inflammation when other procedures have failed. It is said to be useful in fibroid degeneration of the uterus with long standing menorrhagia. In many uterine affections I have used massage in conjunction with the local application of glycerine pads, or the introduction of belladonna or ergot by means of Anderson's antiseptic vaginal capsules. In amenorrhœa, when the menses have been arrested temporarily from some slight disturbing cause, I usually recommend massage for a few days before the expected period, and give tabloids of permanganate of potassium or binoxide of manganese internally.

In a well-known group of symptoms from which women frequently suffer, massage is essentially useful. I recently saw a lady, aged 45, or thereabouts, a professional singer, who was labouring under the impression that she was going mad. She was so nervous that she was quite unable to accept an engagement, although she had been constantly before the public, and had hardly missed a night for twenty years. She told me that she felt she was not to be

trusted, and that, if left alone, she would do herself or her children an injury. She was afraid to go near an open window, so great was the temptation to throw herself out; and she even begged that the knives might be removed from the table at dinner. These symptoms were greatly intensified after each monthly period, and she insisted that she was suffering from cancer, or some organic disease of the stomach or womb. She was restless at night, and would often get up in the early morning and walk for hours, until thoroughly exhausted. She was given full doses of the bromides—a drachm, or more, four times a day—but with only temporary benefit. Massage was then tried; and it seemed, to use her own expression, to soothe her, and calm her, and make her forget her troubles. The case was a prolonged one, but now, at the expiration of three months, she is much better, and will soon be able to resume her professional duties.

In another common and well marked group of symptoms, massage is of essential benefit. I recently saw a lady, aged 38, who had been reduced in circumstances, in consequence of the loss of her hus-

band, who after a long and painful illness, had died of diabetes. She complained of restlessness and pain at night, the pain affecting chiefly the legs and back. She said it was almost indescribable, but was like electric shocks. She described it as "nervous restlessness," and found it was always intensified by worry and anxiety, and was usually worse after a hard day's work. It was worse than pain, and was often so severe that she had to get out of bed and walk about the room the greater part of the night. Three weeks general massage cured her entirely. I have met with several similar cases, and the condition seems to be allied to what is often called "fidgets." I have seen it in quite young women, chiefly in those who are nervous and excitable, and suffer from neuralgia. I do not know of any drug that takes in this group of symptoms, and have no doubt that massage is the best remedy. A lady who suffered from it told me that she was often impelled to get up in the middle of the night and walk round the square in scanty attire.

Massage is a most valuable therapeutic agent, and will yield good results in many complaints, other than those I have roughly indicated.

DIAGRAMS.

I do not think that diagrams are of much use in illustrating the various forms of Massage, but in accordance with a very generally expressed desire I append one or two examples showing the different methods employed. They are as good as a good artist can make them and they show something, though I fear not much. It is a treat to hear Schönberger playing a "Rhapsodie" of Liszt or an "Impromptu" by Schubert, but a photograph of that distinguished performer seated at his pianoforte can give but a faint idea of the delicacy of his touch or of his marvellous powers of execution. And so it is with Massage, an engraving may show the position of the hands at rest, but it can never indicate the various little niceties of touch and the delicacy of execution which, as the result of years of practice, are as a second nature to the thoughtful and intelligent *Masseuse*.

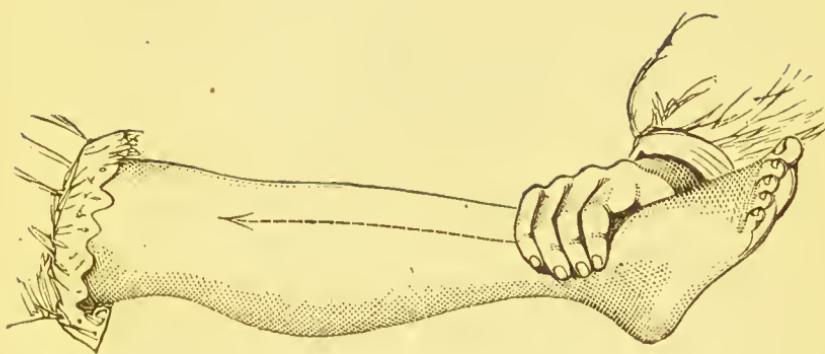


Fig. 1 illustrates the most common method of performing effleurage. The leg is held tightly by the outstretched fingers and thumb just above the ankle, and the hand is carried rapidly and firmly upwards towards the knee. The grasp is then relaxed, the hand returns to its original position, and the manoeuvre is repeated.

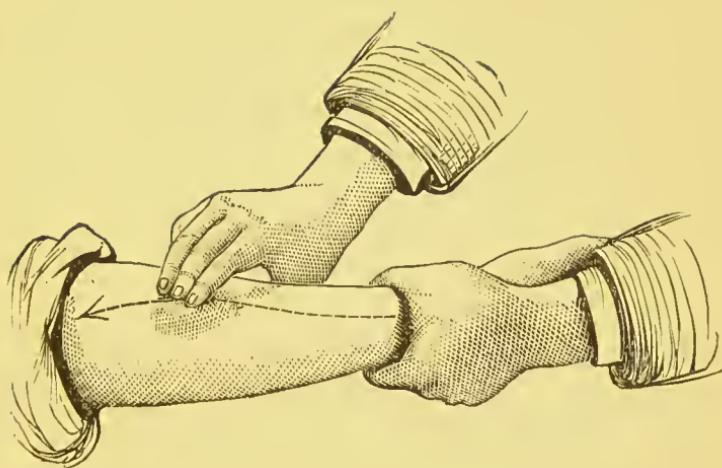


Fig. 2 illustrates another method of performing effleurage, the fingers alone being employed for the purpose. The arm is shown held by the operator, the left hand at the wrist, whilst the fingers of the right hand are carried steadily upwards towards the elbow, care being taken to keep as much as possible in the intermuscular spaces.

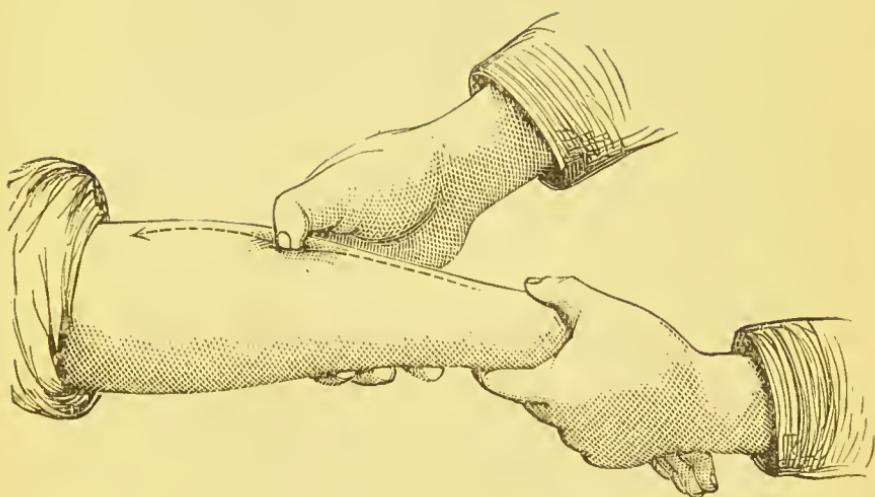


Fig. 3 illustrates a method of performing effleurage with the thumb alone, which whilst moving upwards is held perpendicularly and pressed down deeply between the muscles, so as to stimulate circulation locally and remove effusions or exudations.

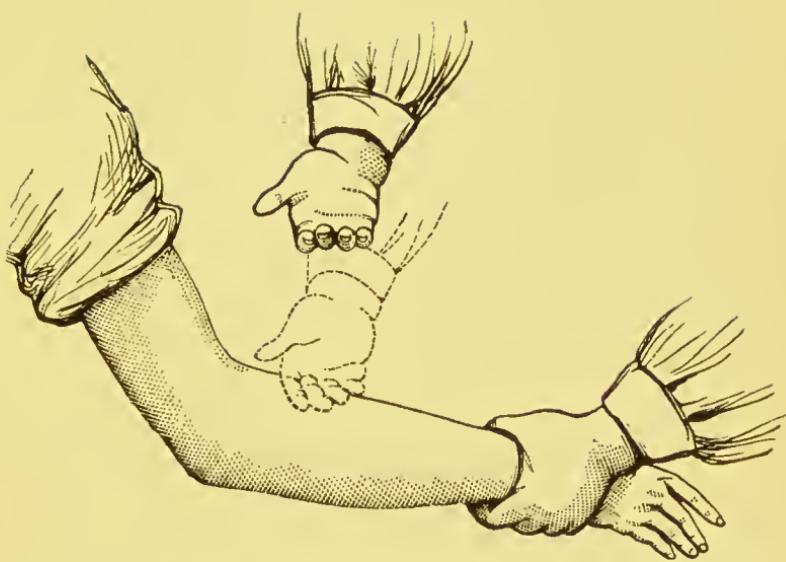


Fig. 4 illustrates a method of performing tapotement, the muscles being struck lightly and rapidly with the dorsal aspect of the fingers of the half-closed hand, so as to stimulate them to contraction.



Fig. 5 illustrates Massage of the Neck, according to Gerst's method. It will be seen that the head is well thrown back, and that effleurage is practised from above downwards, the hands being carried from the lobe of the ear to the shoulder,

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